



# Annual in-depth regional report

▾ NORTHLAND REGION

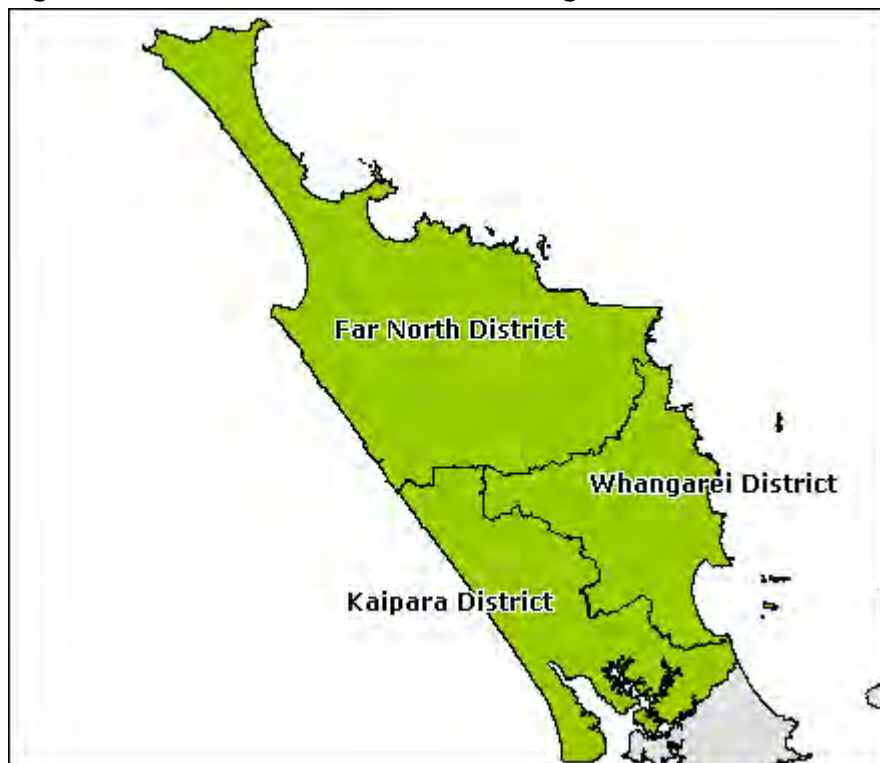


## INTRODUCTION

This report describes in detail the characteristics of the Northland regional labour market, the changes it has undergone and some key outcomes of these changes. The aim is to improve knowledge of the regional labour market among strategy and policy makers, labour market participants and others who have an interest or a stake in the region's labour market. The content of this report links into the processes outlined in the Economic Development Agency of New Zealand (EDANZ)/Department of Labour (DoL) Best Practice Guidelines<sup>1</sup>.

This report brings together a wide range of labour market information released in the past year, much of which is drawn from the 2006 Census. Labour market changes are observed over different timeframes appropriate to the analysis and depending on data availability. Information is based on the Northland Regional Council boundaries and, where available, the constituent Territorial Authority (TA) boundaries. The constituent Territorial Authorities in Northland are Far North District, Whangarei District and Kaipara District, as shown in the map.

**Figure 1: Boundaries of the Northland Region**



The analysis is also informed by contextual knowledge of the region itself. This has been provided by the Department of Labour's regionally based Labour Market Knowledge Managers. Input from their regional colleagues is acknowledged with appreciation.

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<sup>1</sup> Copies of the EDANZ/DoL Regional Labour Market Development Best Practice Guideline are available from the Department of Labour on request.

## **Role of the Labour Market Knowledge Managers**

The Department of Labour's Labour Market Knowledge Managers (LMKMs) work with regional partners (economic development agencies, industry and business groups, other central government agencies, educational institutions, local government, iwi and others) to develop and implement regional labour market strategies. LMKMs contribute:

- specialist labour market information
- strategic skills for labour market development
- knowledge of what works and what doesn't
- 'whole of DoL' engagement (workforce policy, immigration, workplace best practice etc)
- wider government connections.

## **How to contact our Labour Market Knowledge Managers**

We have 15 Labour Market Knowledge Managers located around New Zealand. If you have any queries regarding this document, or if you wish to discuss regional labour market issues, constraints or opportunities please contact:

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A contact list of all LMKMs can be viewed in Appendix 2.

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## EXECUTIVE SUMMARY

**Labour force growth in Northland was slightly larger than the national average between 2001 and 2006.** This was largely due to labour force participation growth in Northland, which reached historical highs in the region. This countered the smaller working-age population growth in Northland compared to the national average.

**Looking forward, the labour force in Northland is expected to keep growing.** The main engine for growth in the labour force in Northland is likely to be the regional population, which is expected to continue to grow, but at a slower rate than the national average. Participation rates are at historically high levels in Northland and therefore the potential for further increases is limited. That said, participation rates in Northland are still relatively low in relation to the national average across a range of groups, including females under the age of 35, males over the age of 25 and people with lower qualifications. Based on this observation, there is potential for participation rates to increase further.

**On average, the qualification level of the Northland's working-age population is lower than the national average but rising qualification levels are in line with the national average.** A higher than average share of the working-age population in Northland have no qualifications and a lower than average share has a Bachelor degree or higher. Between 2001 and 2006, growth in the number of people with vocational qualifications and Bachelor degrees or higher in the region was higher than the national average. The rise in the number of people with no qualifications was small.

**Employment in Northland grew slightly slower than the national average between 2001 and 2006.** The largest number of new jobs was created in the Property and Business Services industry. Significant numbers of new jobs were also created in the Finance and Insurance, Electricity, Gas and Water Supply and Construction industries. Employment in the Agriculture, Forestry and Fishing industry declined.

**Northland's employment growth was below the national average, largely as a result of its industry mix.** Nationwide, the Agriculture industry has shed jobs in recent years. The economic conditions that have caused this have had a relatively large impact on Northland, as the industry is a large employer in the region. The positive impact of growth in the rapidly expanding Property and Business Services industry has been slightly offset in Northland because the industry is smaller than the national average.

**A large proportion of employment growth has been in highly skilled and skilled occupations such as Managers, Professionals and Technicians.** This is partly because of growth in industries such as Property and Business, Health and Community Services and Retail Trade where many skilled and highly skilled people work. It is also partly a result of up-skilling in these industries and others such as Manufacturing, Construction and Recreational services.

**Skill shortages are most likely to exist in higher skill occupations such as Professionals, Technicians and Associate Professionals, and Legislators, Administrators and Managers.** This is based on information about employment growth in the region and national evidence of skill shortages. Anecdotal information from Northland also suggests that skills shortages also exist in the Marine industry and many Trades occupations. To ease this skill shortage will require a combination of up-skilling of existing resources, productivity increases (higher value produced per hour of work) and migration of skilled labour.

**The labour force grew in all of Northland's constituent territorial authorities between 1996 and 2006, most noticeably in Whangarei District between 2001 and 2006.** Labour force growth in Whangarei District was most likely the result of strong increases in the working-age population and participation rates. In the Far North District and Kaipara District, strong increases in labour force participation and moderate working-age population growth were key factors for labour force growth.

**Employment rates have increased throughout Northland's territorial authorities, as they have nationally between 1996 and 2006.** In Kaipara District and Whangarei District, the employment rate is now over 61%. Far North District, while only having an employment rate of 52% in 1996, had the highest employment rate increase in the following 10 years, increasing 11%. The employment rate disparities that were evident in 2001 still exist, despite the gap closing somewhat.

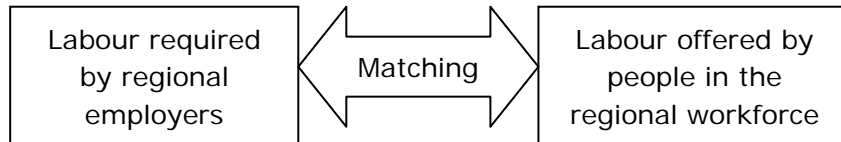
**Looking forward, the labour force can be expected to grow in Whangarei District and Far North District.** This is based on projected future population growth in these areas and assuming that participation rises be consolidated or even rise further, given their relatively low participation rates. Given that the future population is projected to remain static in Kaipara District, it is less likely that the labour force will grow. Any future labour force growth in Kaipara District will result from an increase in the labour force participation rate, which is currently still low relative to the national average. It is questionable how much higher participation rates within Northland can increase in future, given current participation rates are at historical highs in Northland.

**Qualification levels of working-age people in all Northland's territorial authorities improved between 2001 and 2006.** There has been strong growth in working-age people with Level 1 certificates or higher in Northland. Growth in working-age population with no qualifications was greater than the national average in Whangarei District and Kaipara District.

**In all Northland territorial authorities, the reduction in unemployment has been the result of employment growth outstripping growth in the labour force.** This means that the labour available to employers has expanded, but employers' labour requirements have expanded by more. Simply put, the pool of labour that is excess to employers requirements has contracted.

## 1. HOW REGIONAL LABOUR MARKETS WORK

The structure of this report is encapsulated in the following diagram, an expanded version of which is displayed in Appendix 1.



The diagram in Appendix 1 reflects the Human Capability Framework developed by the Department of Labour and presented on the Department of Labour website – <http://www.dol.govt.nz/initiatives/strategy/hcf/>.

Labour markets are the environment and process by which employers' labour<sup>2</sup> needs are matched to the labour offered by people in the workforce. When employers advertise their job vacancies, job seekers apply for jobs, and employers select the most appropriate candidate. This is all part of the labour market matching process. As the diagram in Appendix 1 shows, this is affected by the wider regional, national and global environments within which labour markets operate.

### Employers' labour requirements

Employers' labour requirements are the number of people they want to employ, the number of hours they want them to work and the skills and attributes they need them to have to perform their jobs. The expanded diagram in Appendix 1 shows that labour requirements depend primarily on the goods and services that businesses produce. For instance, a dairy farmer needs different types of skills to a surveyor. The way that businesses are organised is also important. One dairy farm might employ more farm managers or farm labourers than another. Business organisation depends on many things, but the size of the business, the technology used and the productivity of the operation are three of the most important.

### Labour offered by the labour force

The labour offered by the workforce is the number of people who are willing and able to work, the number of hours they want or are able to work and the skills and attributes they bring to the workplace. All this depends on people's attributes, preferences and personal circumstances. For example, some people are trained to work with computers, while others might have a preference for customer service. People also participate in the labour market to differing degrees. Some people may choose to work full-time, part-time, or not to work at all. Others may be constrained in this choice by personal circumstances.

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<sup>2</sup> In this context, labour refers to the amount of time worked, and the skills and other personal attributes applied in that work.

## **The changing labour market**

The diagram in Appendix 1 also shows that labour markets are constantly changing. Shifts in the extent and nature of labour that employers need occur as businesses start up in the region or cease to operate, and move to and from the region. The goods and services that businesses produce evolve in response to customer demand, and businesses change how they are organised – perhaps because they are growing or adopting new technology. Changes in the extent and nature of labour on offer occur as workers in the region develop their skills, change the hours they work, begin working or stop working. People also move into and out of the region. This ‘migration’ of labour between regions can be particularly significant in explaining the balancing of labour market demand and supply to reach a labour market outcome<sup>3</sup>.

## **Labour market outcomes**

The extent to which people, their skills and their other attributes are matched to the job opportunities on offer is a key outcome of the labour market. It has implications for the economy. For example, if employers are unable to find the skills they need, this can constrain business expansion. It also has implications for individuals, families and communities. People’s ability to find work and the work they do impacts on their standard of living and their broader well-being.

## **Understanding the Northland regional labour market**

Although all regional labour markets are expected to basically work in the way outlined above, every region is unique. Some of the unique characteristics of labour on offer to employers in the Northland workforce are covered in section 2. Section 3 outlines some of the characteristics of Northland employers’ labour requirements. Section 4 looks at some key labour market outcomes to better understand how well labour requirements are being matched to the labour on offer in Northland.

This In-depth Regional Labour Market profile brings together a wide range of labour market information (LMI) produced on a quarterly, annual and five-yearly basis to provide a complete and in-depth picture of the regional and sub-regional labour markets.

Throughout this report, a series of questions are included in grey boxes. The inclusion of these questions reflects the role of these reports as a prompt for regional discussion of local labour market issues, and as a tool to support strategic decision making.

A Data Dictionary is included in the appendices. This dictionary gives an introduction to the different labour market information that has been used in the production of these reports.

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<sup>3</sup> Maré, David C. and Timmins, Jason (2004) “Internal Migration and Regional Labour Markets In New Zealand”

## **2. LABOUR OFFERED BY THE LABOUR FORCE**

The workforce is the labour pool available to employers. Strictly speaking, it is made up of people who are working, and people who are not in work but who are available for work and actively seeking work (the unemployed)<sup>4</sup>. The rest of the population is either too young to work, or are not in the labour force (in other words, not working and either not available for work or not actively seeking work). People might not be in the labour force for a number of reasons including retirement, looking after children or studying full-time.

On average in New Zealand, over two-thirds of the working-age population (people aged 15 years and above) are in the labour force. The characteristics of the labour force therefore strongly reflect the characteristics of the population. Moreover, projected changes in the population are likely to impact on the future labour force. The first part of this section looks at the size and make-up of the regional population, and how it is changing. Information is provided about people's sex, age, ethnicity and migrant status. These are all characteristics that can have a bearing on people's labour force participation.

The second part of this section looks specifically at the skills of the regional working-age population. Skills are a difficult thing to measure. Information about formal qualifications is provided in this section because this is a key aspect of skills, and the data are readily available. Availability of other information about skills such as on-job training, work experience and personal attitude is limited and is not available in this report.

The third part of this section looks specifically at the workforce and asks the question: to what extent do different types of people participate in the labour force? It is useful to understand how participation varies across people of different skills, sex, age, ethnicity and migrant status because it increases understanding of the labour offered by the labour force, and the types of people who are under-represented in the labour market.

The fourth part of this section looks at where people commute from to work in the regional labour market. Some people might commute in from other regions. This analysis helps to geographically define the regional labour market in terms of the places people travel from to work there.

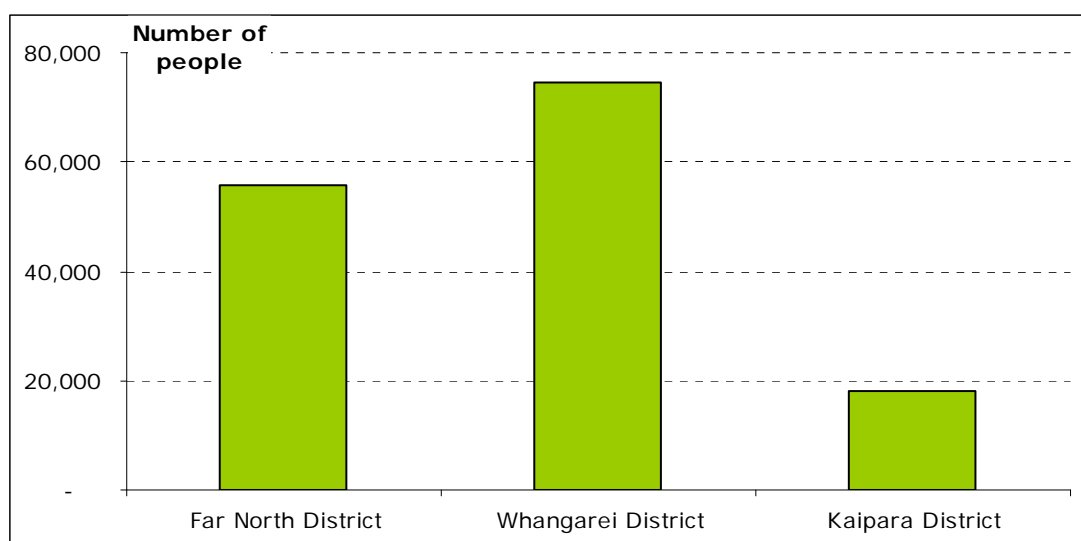
### **2.1 Population trends**

In 2006, 148,443 people lived in the Northland Region. Half of the all people in Northland lived in Whangarei District (74,463 residents). Outside of Whangarei District, 55,845 people lived in Far North District and 18,135 in Kaipara District.

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<sup>4</sup> In reality, some people classed as not in the labour force are part of the labour pool. For example, some might have become discouraged from looking for work but would accept a job if the right one came along.

**Chart 1: Population in Northlands Territorial Authorities in 2006**



Source: Census 2006, Statistics New Zealand

As a whole, the population of Northland Region grew by almost 8,500 people or 6% between 2001 and 2006. This was slower than the national growth rate of 8%. If the Auckland Region is excluded from the national average growth rate (the Auckland Region has a significant impact on the national average), the population in Northland grew at the same as the national average (6%). The population of Whangarei District grew faster than Kaipara District and Far North District between 2001 and 2006, and growth was moderate between 1996 and 2001. Based on this growth and population projections, the concentration of people living in Whangarei is expected to remain the same, with a marginally higher concentration of the population in the Far North District, and a marginally smaller proportion of the population based in Kaipara District.

**Table 1: Population trends 1991 to 2026**

	Growth rates				Share of population <sup>5</sup>	
	1991-96	1996-01	2001-06	2001-26	2006	2026
New Zealand	7%	3%	8%	27%		
Northland Region	8%	2%	6%	14%	4%	3%
Far North District	12%	3%	2%	15%	38%	39%
Whangarei District	7%	2%	9%	17%	50%	50%
Kaipara District	2%	1%	4%	0%	12%	11%

Source: Census 1991, 1996, 2001 and 2006 and Statistics New Zealand Population Estimates and Projections

Note: Statistics New Zealand releases three population projection series (low, medium and high) incorporating different fertility, mortality and migration assumptions. Table 1 uses the medium population projection assumption. At present, Statistics New Zealand considers the medium projection series the most suitable for assessing future population changes. Revised projections including 2006 Census results will be released later in 2007.

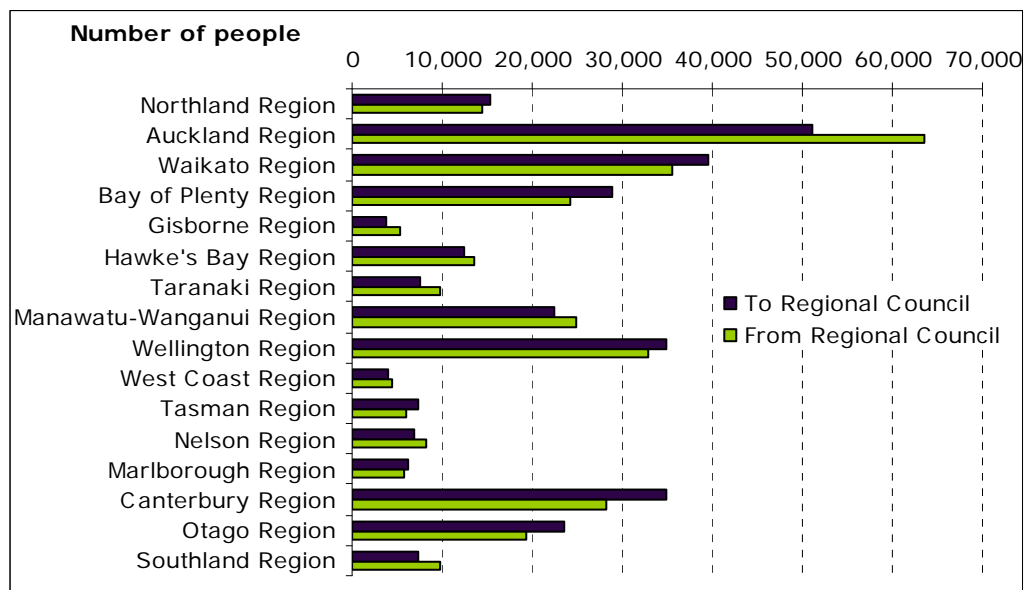
<sup>5</sup> The Share of Population columns show the region's share of the national population, and the TA's share of the region population.

## Inter-regional migration

The migration of people between regions can significantly change the size and make-up of regional populations. Between 2001 and 2006, the Northland Region experienced a net gain of almost 900 people from other regions. The net gain of people to the Northland Region was small relative to other regional councils. On average, a region gains and loses around 8% of the regional population between Censuses. As measured by the 2006 Census, the number of people moving to Northland was 10% of the population, while the number leaving the region was equivalent to approximately 10% of the population, making the population marginally more transitory than the average.

Inter-regional migration data does not measure people who spend short but frequent periods of time in the Northland Region. Anecdotal evidence from the Northland Region indicates that the number of people living in Auckland who own holiday or weekend houses in Northland, particularly in Kaipara District and Whangarei District, has increased in recent years. These people have the potential to put strain on the labour market through the inconsistent demands that they place on goods and services providers in the region. The extent to which people living in Auckland frequent the Northland Region for short periods of time is largely unknown, but is generally seen to be increasing.

**Chart 2: Inter-regional migration from 2001 to 2006**

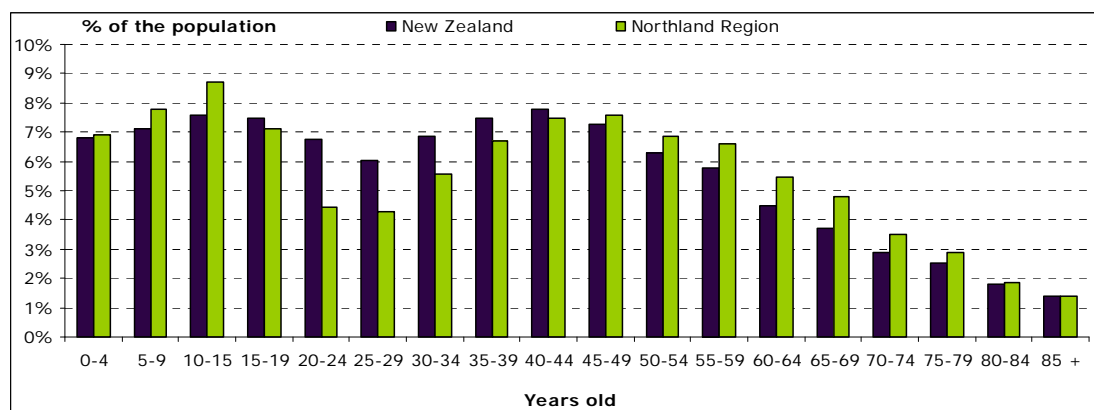


Source: Census 2006, Statistics New Zealand

### ***The age profile of the population***

Age is an important factor in the ability of people to work. In 2006, the number of people in their 20s and 30s in Northland made up a relatively small part of the population compared to the national average. On the other hand, the proportion of people aged in their 40s and older was relatively large. People aged in their 20s, 30s, 40s and 50s are most likely to be in work. The number of young people (people under the age of 15; the future workforce) in Northland was relatively large. As these people reach their 20s, they should boost the relative size of the working-age population, assuming they do not move out of the area as described below. The number of people aged over 60 years was also relatively large compared to the national average. New Zealand doesn't have an official retirement age, so these people are counted as part of the working-age population for official purposes, but realistically, these people are unlikely to be in work.

**Chart 3: Population by age in 2006**



Source: Census 2006, Statistics New Zealand

The overall age profile of people living in Northland is similar across Northland's TAs. The age profile across Northland's TAs is projected to remain in the future.

In 2006, people under the age of 15 made up a slightly larger part of the population in Northland Region compared to the national average. This bodes well for the future workforce in Northland, assuming these people do not migrate out of the region. The slightly larger proportion of people under the age of 15 in Northland compared to the national average is projected to remain in the future.

The proportion of the working-age population aged 15–39 is relatively small across all Northland TAs compared to the national proportion. The relatively small share of people aged 15–39 in Northland in 2006 compared to the national average is projected to remain over the next 20 years. This projection suggests that a number of people in the current population aged 0–14 will not remain in the region in the future. Inter-regional migration data show a large number of young people (people aged 15–24) leave the Northland Region. Between 2001 and 2006, there was a net outflow of 3,000 young people from Northland to other regions in New Zealand. Enterprise Northland, Northland's Economic Development Agency, has developed the Education 4 Enterprise programme to try and stem the flow of young people leaving the Northland Region. The programme aims to

achieve this by lifting the attitudes and aspirations of young people and by showcasing the possibilities for enterprise that exist within the Northland Region.

The aging of the population changes the mix of products and services consumed in a region, but there are also risks for the workforce. For example, business opportunities are created for providers of aged care, and aged care workers. However, retirees from the workforce need to be replaced by younger people, otherwise the workforce contracts. Regions that already have a relatively old demographic profile, that tend to attract older people for lifestyle reasons or that lose younger people to regions that perhaps offer greater tertiary education or job opportunities face a greater risk of seeing their workforce contract.

Northland has a large older population base. In 2006, the proportion of people aged over 40 was relatively large across all TAs in Northland compared to the national average. The large proportion of people aged over 40 in Northland is expected to increase at a faster rate than the national average over the next 20 years.

**Table 2: Population by age in 2006 and 2026**

	Population composition (%) in 2006				Population composition (%) in 2026			
	0–14	15–39	40–64	65+	0–14	15–39	40–64	65+
New Zealand	22%	35%	32%	12%	17%	31%	32%	20%
Northland Region	23%	28%	34%	14%	18%	25%	32%	26%
Far North District	24%	27%	35%	14%	18%	24%	33%	26%
Whangarei District	23%	29%	33%	15%	18%	26%	31%	25%
Kaipara District	23%	26%	35%	15%	18%	22%	32%	28%

Source: Census 2006 and Statistics New Zealand Population Estimates and Projections

Note: Statistics New Zealand releases three population projection series (low, medium and high) incorporating different fertility, mortality and migration assumptions. Table 2 uses the medium population projection assumption. At present, Statistics New Zealand considers the medium projection series the most suitable for assessing future population changes.

### ***The ethnic profile of the population***

Northland has a relatively large Maori population. In 2006, the percentage of people in Northland TAs identifying themselves as of Maori ethnicity living was notably larger than the national average. The greatest share, and absolute number, of Maori in Northland lived in Far North District. The overall proportion of people who identified as European in Northland was slightly smaller than the national average. This said, the European ethnic group was relatively large in Kaipara District and Whangarei District compared to the national average and to the Far North District. People who identified as being of Asian or Pacific ethnicity made up a small proportion of the population across Northland.

As part of the 2006 Census, the ethnicity of 'New Zealander' appeared first as a standard output. In 2006, 11.1% of respondents listed New Zealander as one of their ethnicities. In previous Censuses, responses identifying New Zealander as the only ethnicity were coded within New Zealand European category.

Statistics New Zealand are currently analysing the characteristics of respondents who classify themselves as a New Zealander. Initial analysis suggests that people who list their ethnicity as New Zealander are more likely to be aged between 30–59, and more likely to be male than female.

**Table 3: Population by ethnicity in 2006**

	Population composition (%) in 2006					
	European Ethnic Groups	Maori Ethnic Group	New Zealander	Asian Ethnic Groups	Pacific Peoples Ethnic Groups	Other Ethnic Groups
New Zealand	65%	14%	11%	9%	7%	5%
Northland Region	63%	29%	10%	2%	2%	8%
Far North District	54%	40%	8%	1%	3%	10%
Whangarei District	67%	24%	11%	2%	2%	6%
Kaipara District	72%	21%	10%	1%	2%	6%

Source: Census 2006, Statistics New Zealand

Note: This profile is based on people's own perceptions of their ethnicity. A number of people identify themselves as having multiple ethnicities, therefore the percentages sum to more than 100%.

### ***The migrant profile of the population***

A small proportion of Northlanders are migrants. In 2006, 13% of Northland's population was born overseas compared with 22% nationally. Auckland has a significant impact on the national average; 35% of the regional population (the largest regional population in New Zealand) was born overseas.

A large proportion of migrants have been in New Zealand for more than 10 years. In 2006, 60% of Northland's population born overseas had been in New Zealand for 10 years or more (compared with 50% of overall migrants in NZ). Within Northland's constituent TAs, Kaipara District had the largest proportion of migrants who have been in New Zealand for more than 10 years. Around 20% of Northland migrants had been in New Zealand less than 5 years (compared with around a quarter of overall migrants in New Zealand). Not surprisingly, older migrants in Northland tended to have been in New Zealand longer than younger migrants; 88% of migrants aged 65 years or more had been in New Zealand for 10 years or more (84% nationally) compared with 9% of people aged 15 to 64 years (8% nationally).

***Discussion point 1:***

- **Do the trends outlined here fit with what you have heard in the region?**
- **How do you expect the regional population to grow or decline (i.e. numbers, types of people)?**
- **Does your region have difficulty retaining certain types of people (e.g. youth)? Why is this?**
- **What kinds of people does your region want to attract (e.g. families, skilled migrants)?**

## **2.2 Skills**

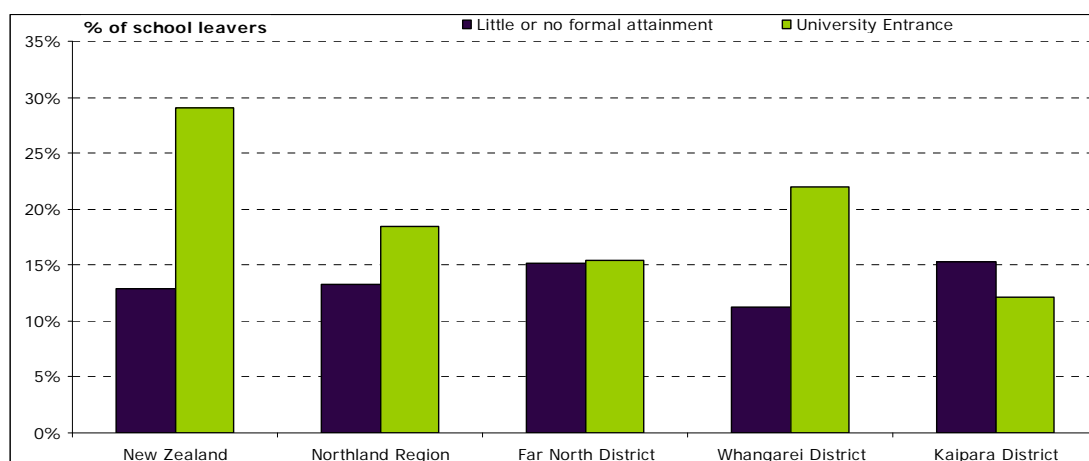
### ***School leaver attainment***

Young people's attainment at school has a significant impact on their future labour market outcomes. On average in 2005, Northland's school leavers reached lower levels of attainment compared with the country as a whole. The percentage of people with university entrance qualifications was lower than the national average while the same proportion of school leavers had little or no formal qualification attainment.

School leaver attainment varies across Northland TAs, but overall, Whangarei school leavers achieve higher levels of attainment. In 2005, Whangarei District had a higher percentage of school leavers with University Entrance qualifications compared with Far North District and Kaipara District. Whangarei District had a lower percentage of school leavers with little or no formal qualification attainment compared with the national average. On the other hand, Far North District and Kaipara District had a higher percentage of school leavers with little or no formal qualification attainment compared with the national average. Kaipara District also had a larger percentage of school leavers with little or no formal qualification attainment than with University Entrance qualifications.

A number of projects have been set up in Northland targeting young people in response to the lower levels of attainment gained by Northland school leavers. Two examples of such projects are the Youth Transitions Service and Kaipara Youth Connections project. These projects have been established to provide advice and mentoring to at-risk youth and to help youth with low qualification levels transition into employment or training.

**Chart 4: School leaver attainment in 2005**



Source: Ministry of Education

Note: Little or no formal attainment refers to school leavers with fewer than 14 credits at NCEA level 1, 2, or 3.

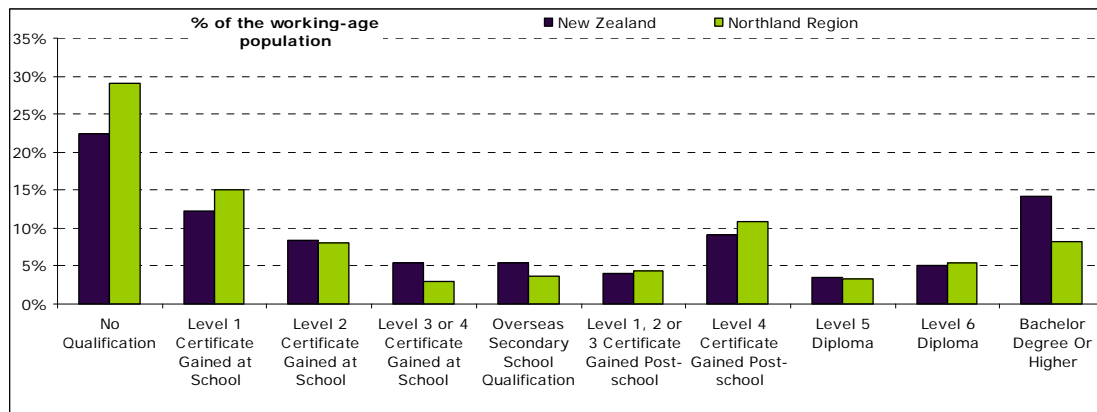
### ***Skills of the working-age population***

The working-age population in Northland has, on average, lower qualification levels than the national average. In 2006, 29% of the Northland working-age population had no qualification compared with 22% nationally while 8% of the regional working-age population had a Bachelor degree or higher compared with the national average of 14%.

Generally, across higher qualification levels, with the exception of Level 4 certificates gained post-school and Bachelor degrees or higher, Northland's working-age population was similarly qualified to the national average. The proportion of the working-age population in Northland with a Level 4 certificate gained post-school was higher than the national average.

Whangarei has the most highly qualified working-age population in the region. In 2006, only 27% of working-age people had no qualification compared with 33% in the Kaipara District and 30% in the Far North District. A larger percentage of people residing in Whangarei District had Bachelor or higher degrees compared with Far North District and Kaipara District; 9% of working-age people had Bachelor or higher degrees compared with 8% in the Far North District and 6% in the Kaipara District.

**Chart 5: Highest qualification of the working-age population in 2006**



Source: Census 2006, Statistics New Zealand

The working-age population is becoming more highly qualified in Northland. Between 2001 and 2006, the share of the working-age population with no qualifications, or with only school based qualifications declined.

Over the same period, the share of the population with higher qualifications (Level 1 to 3 qualifications gained post school and higher) grew noticeably. The largest increase in share was for the working-age population with Level 4 to 6 qualifications.

These qualifications are frequently based on industry skills, reflecting the availability of work for people with these skills in Northland.

**Table 4: Change in the share of highest qualification of the working-age population 2001 to 2006**

	Change in Share of Highest Qualification 2001 to 2006				
	No Qualification	School Based Qualifications	Level 1, 2 or 3 Certificate Gained Post-school	Level 4 Certificate Gained Post-school or Level 5 or 6 Diploma	Bachelor Degree Or Higher
New Zealand	-1%	-3%	0%	4%	4%
Northland Region	-1%	-2%	1%	5%	3%
Far North District	-1%	-1%	1%	5%	3%
Whangarei District	-1%	-3%	1%	5%	3%
Kaipara District	-1%	-2%	1%	5%	2%

Source: Census 2001 and 2006, Statistics New Zealand

Note: Highest qualification levels in this table differ to highest qualification levels in Chart 5. The qualifications in this table have been aggregated to increase comparability between 2001 and 2006 Census data. The 2006 Census had a different classification system to the 2001 Census. As a result of the classification changes, some 2001 qualifications were not coded the same way in 2006. The changes primarily affect Level 4 certificate gained post-school, Level 5 diploma and Level 6 diploma.

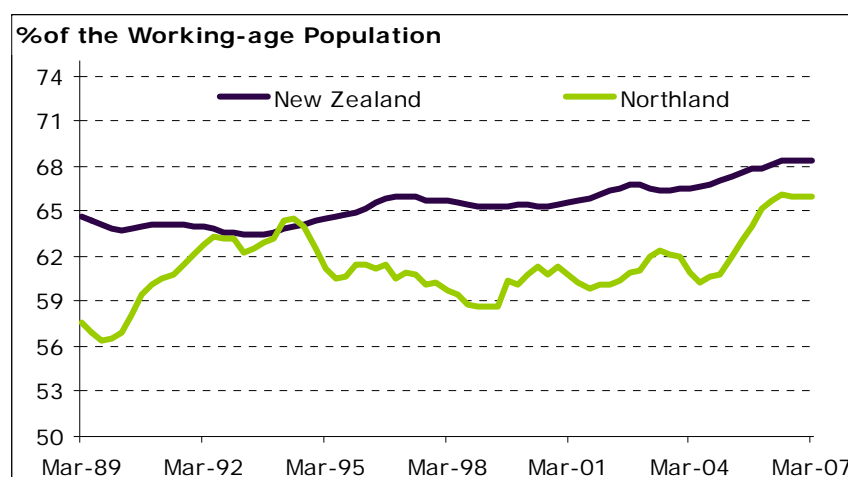
## 2.3 Labour force participation

The information in this section refers to the labour force participation of people living in the Northland Region, regardless of whether or not they work in Northland or commute to another region. In that respect, it is a relatively crude measure of the labour pool available to employers in the Northland Region. In reality, the employers' labour pool is defined by the area of residence within which people are willing to travel to work for them.

### *Participation trends<sup>6</sup>*

The Northland labour force participation rate has, apart from a brief period in 1994, been below the national average since comparable records began. The overall participation rate in Northland over this period has, however, grown at a faster rate than the national average. In March 2007, Northland's labour force participation rate was 66.0% (68.5% nationally), up from 60.9% in March 2004 (66.5% nationally). Alongside growth in the working-age population, this has contributed to growth in the regional workforce.

**Chart 6: Labour force participation rate from 1989 to 2007 (12-month moving average)**



Source: Household Labour Force Survey, Statistics New Zealand

Data from the 2006 Census confirms the increasing trend in the participation rate in the Northland Region between 1996 and 2006. The 2006 Census shows that this was consistent across Northland TAs. Increases in the labour force participation rate and working-age population (see Table 5) in Northland between 2001 and 2006 led to increases in the size of the labour force in Northland.

Participation rates in Northland TAs were relatively low compared to the national average, despite increasing between 2001 and 2006. This may be a result of the relatively older population in Northland TAs compared to the national average (see Table 2). Based on the comparatively low labour force participation rates in

<sup>6</sup> Labour force participation rates from the Household Labour Force Survey and Census differ. This is a result of the different scope and coverage of the two surveys. For more see the Data Dictionary.

Northland there appears to be scope for further participation rate increases in the future, assuming labour force participation rate increases are sustainable and the population continues to grow as projected (see Table 1).

**Table 5: Change in the regional labour force 1996 to 2006**

	Change in the Working-Age Population (2001-2006)	Participation Rate (%)			Change in the Labour Force (2001-2006)
		1996	2001	2006	
New Zealand	9.4%	65.4%	66.7%	68.5%	12.1%
Northland Region	8.3%	61.4%	62.1%	64.5%	12.6%
Far North District	5.0%	60.0%	60.5%	63.3%	10.7%
Whangarei District	11.4%	61.9%	62.9%	65.0%	14.8%
Kaipara District	6.1%	63.1%	64.1%	65.9%	9.2%

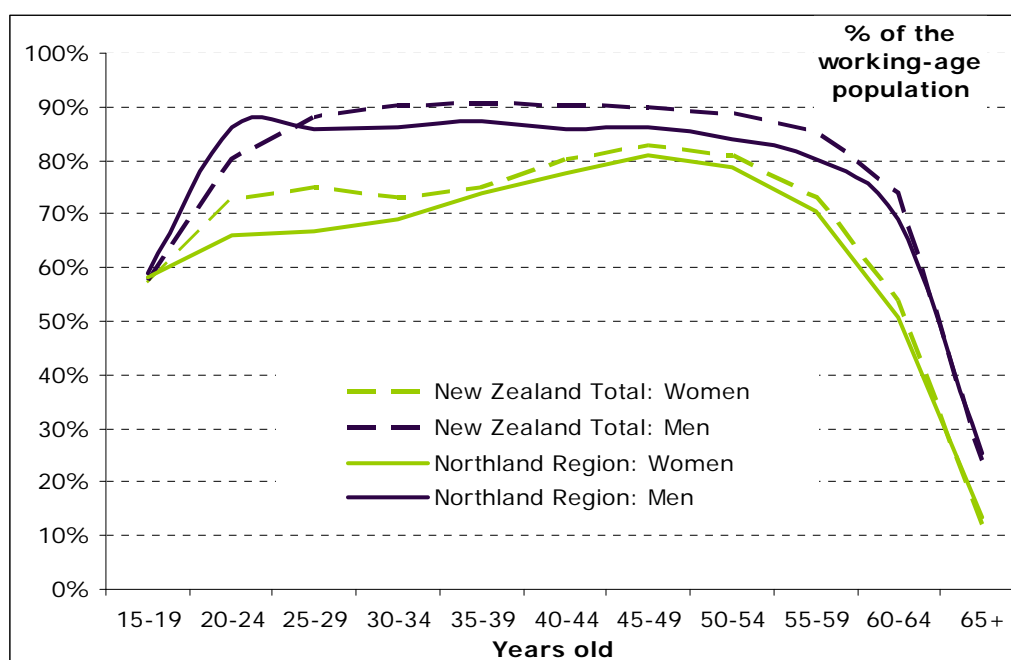
Source: Census 1996, 2001 and 2006, Statistics New Zealand

### ***Participation of men and women of different ages***

Labour force participation varies across age groups in Northland and differs to that of the country as a whole. Nationally, young people's participation tends to be low because many people remain in education after school rather than entering the job market. Among people in their 20s and 30s, men's participation is higher mainly because of the share of women that leave the labour force to have children while in this age group.

Census 2006 data shows that the males under the age of 25 in Northland have higher participation rates than the national average. This could be a result of young males choosing to finish education at a young age and enter the workforce (as suggested by the high percentage of school leavers with little or no formal qualification in Chart 4). Males aged over 25, on the other hand, have lower participation rates than the national average. Participation of females in the labour force in Northland is consistently lower than the national average across all age groups, particularly the 15–29 year old group.

**Chart 7: Northland labour force participation rate by age by sex in 2006**



Source: Census 2006, Statistics New Zealand

### ***Adjusted participation rates***

Differences between regional and sub-regional participation rates can be caused by differences in labour market performance and by differences in the demographic profile of the population. For example, in a region that has a relatively small share of its population in the prime age working-age population (15-64 years) groups, such as Northland (see Table 2), the participation rate will tend to be lower irrespective of how the labour market is performing.

The effect of this is seen in Table 6. Adjusted labour force participation rates are estimations of what participation rates would be if the age and sex profile of the regional population was the same as the national average.

Adjusted 2006 participation rates in Northland were higher than unadjusted participation rates (2.0 percentage points higher). This means that, if Northland's age profile was similar to the national average (that is, a larger proportion of people aged 15-45 and a smaller proportion of people aged over 40), the participation rate in the region would be two percentage points higher than it was in 2006.

Northland's adjusted participation rate in 2006 is lower than the national participation rate. This tells us that, even after taking into account the different makeup of working-age people in Northland, there is a smaller percentage of Northland's working-age population either in employment or looking for employment (unemployed) compared to the national average.

Adjusted 2006 participation rates were higher than unadjusted participation rates in all Northland's TAs. This is notably the case for Whangarei District, where the

2006 adjusted participation rate is 2.5 percentage points higher than the unadjusted participation rate.

**Table 6: Labour force participation rate adjusted for age and sex in 2006**

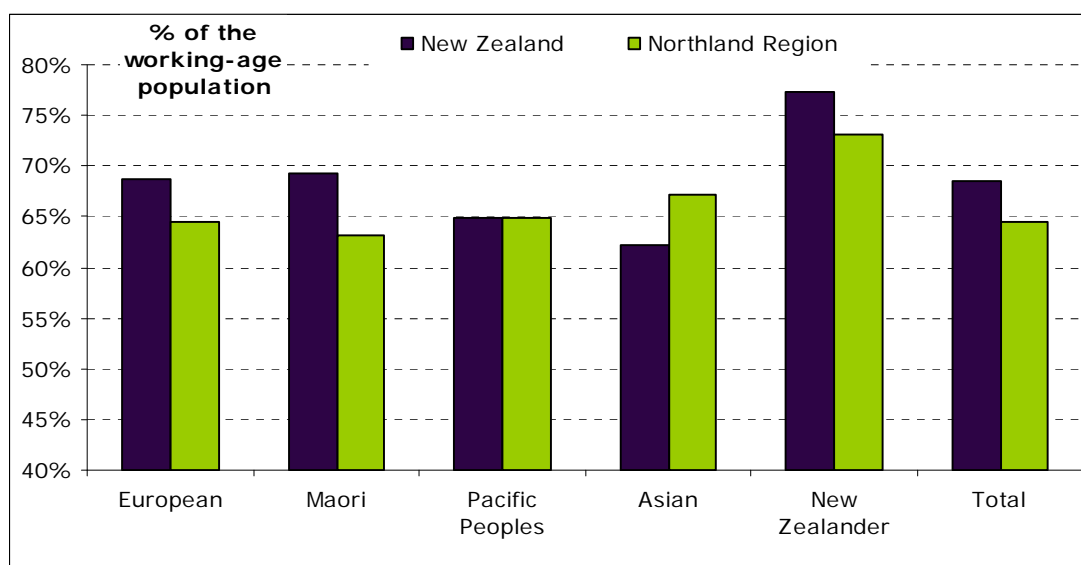
	Participation Rate (%)	
	Unadjusted	Adjusted
New Zealand	68.5%	68.5%
Northland Region	64.5%	66.5%
Far North District	63.3%	64.7%
Whangarei District	65.0%	67.5%
Kaipara District	65.9%	67.6%

Source: Census 2006, Statistics New Zealand

### ***Participation of people in different ethnic groups***

National labour force participation rates for European and Maori ethnic groups were higher than Pacific people and Asian ethnic groups. In Northland in 2006, the situation was reversed with people of European and Maori ethnicities having lower participation rates than the national average. Table 3, earlier in this report, shows the Asian ethnic group only made up a small proportion of the population in Northland in 2006 (2% compared with 9% nationally).

**Chart 8: Labour force participation rate by ethnicity in 2006**



Source: Census 2006, Statistics New Zealand

Participation rates vary in Northland TAs. While labour force participation rates were lower throughout Northland compared to the national rate, in 2006, Far North District had the lowest participation rate. Maori labour force participation rates were noticeably lower in Far North District. In 2006, Maori made up a relatively large share of the population in Far North (see Table 3).

**Table 7: Labour force participation rate by ethnicity in 2006**

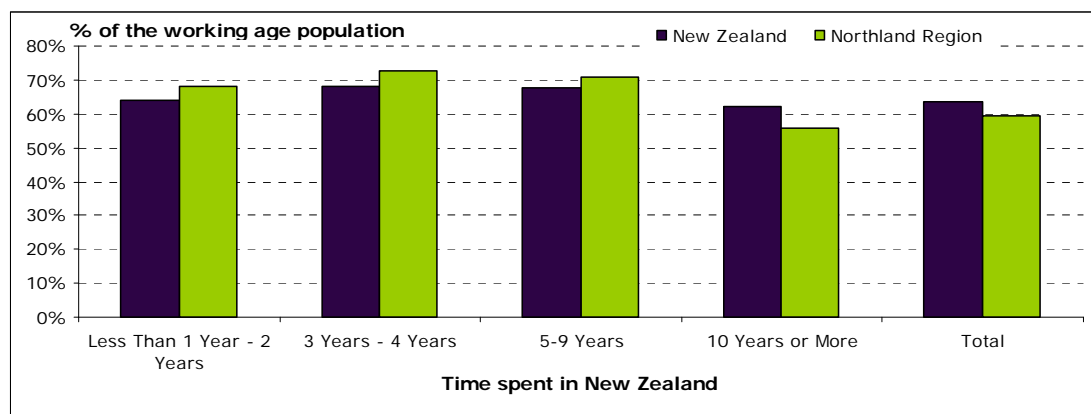
	Participation rate (%)					Total
	European	Maori	Pacific Peoples	Asian	New Zealander	
New Zealand	68.7%	69.3%	65.0%	62.2%	77.4%	68.5%
Northland Region	64.4%	63.2%	64.9%	67.2%	73.1%	64.5%
Far North District	64.5%	60.9%	63.2%	68.1%	72.7%	63.3%
Whangarei District	64.1%	66.0%	65.8%	66.5%	73.2%	65.0%
Kaipara District	65.5%	64.7%	66.2%	69.4%	73.4%	65.9%

Source: Census 2006, Statistics New Zealand

***Participation rates of migrants***

Migrants are a key part of a population profile because the labour market experiences of recent migrants tend to be poorer than those of New Zealanders. The reasons for this are complex and must take into account differences in personal attributes between the groups being compared. Migrants make up a relatively small part of the Northland population (compared to say Auckland, where there are a large number of migrants). In 2006, the participation rate of migrants in Northland was largely similar to the national average.

**Chart 9: Labour force participation rate by time spent in New Zealand in 2006**

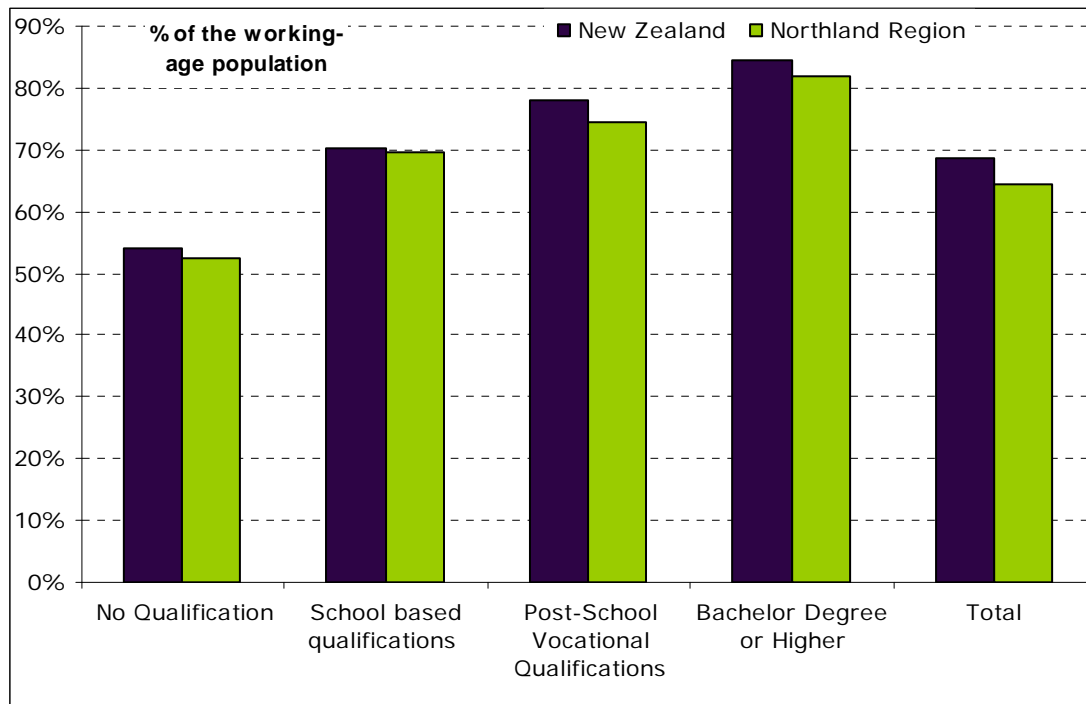


Source: Census 2006, Statistics New Zealand

***Participation rates of people with different qualification attainment***

New Zealand participation rates are generally higher for people with higher qualification levels. This pattern is seen in Northland where participation levels are higher for people with Bachelor degrees or higher. In Northland in 2006, 83% of people with Bachelor degrees or higher participated in the labour force compared with 84% nationally. People with no qualifications participated less in the labour force, seen here by the participation rate of just over 50% for both the region and the national average. Overall participation rates in Northland were lower across all qualification levels compared to New Zealand as a whole.

**Chart 10: Labour force participation rate by highest qualification in 2006**



Source: Census 2006, Statistics New Zealand

In 2006, the participation rate for people with no qualifications was relatively low in Far North District and Whangarei District but relatively high in Kaipara District compared to the national average. The participation rate for people with higher qualifications (Level 1–6 certificate gained post-school and Bachelor degree or higher) was low across all three territorial authorities in Northland, especially Far North District.

**Table 8: Labour force participation rate by highest qualification in 2006**

	Participation rate (%)										Total
	No Qualification	Level 1 Certificate Gained at School	Level 2 Certificate Gained at School	Level 3 or 4 Certificate Gained at School	Overseas Secondary School Qualification	Level 1, 2 or 3 Certificate Gained Post-school	Level 4 Certificate Gained Post-school	Level 5 Diploma	Level 6 Diploma	Bachelor Degree Or Higher	
New Zealand	54.2%	71.7%	76.7%	70.9%	56.8%	76.0%	80.1%	82.4%	73.5%	84.4%	68.5%
Northland Region	52.3%	69.9%	74.7%	72.8%	54.2%	72.3%	76.0%	79.4%	69.7%	82.0%	64.5%
Far North District	52.5%	69.4%	73.4%	72.1%	56.2%	71.3%	74.5%	77.7%	69.7%	79.2%	63.3%
Whangarei District	51.2%	70.0%	75.3%	73.7%	53.0%	73.2%	76.7%	80.8%	68.9%	83.5%	65.0%
Kaipara District	55.9%	71.2%	75.9%	71.4%	51.7%	71.4%	77.1%	77.8%	74.0%	82.6%	65.9%

Source: Census 2006, Statistics New Zealand

***Discussion point 2:***

- **What types of people face disadvantages in your regional labour market, why is this, what opportunities are there to increase participation and what's being done about it?**
- **Are there any concentrations of low participation in your region among groups or people or in local areas?**
- **What barriers exist to labour market participation such as affordable housing, cultural issues, transport, childcare, healthcare, low skills, motivation, discrimination?**
- **What is the availability, awareness and take-up of regional services that are designed to help people overcome such barriers?**

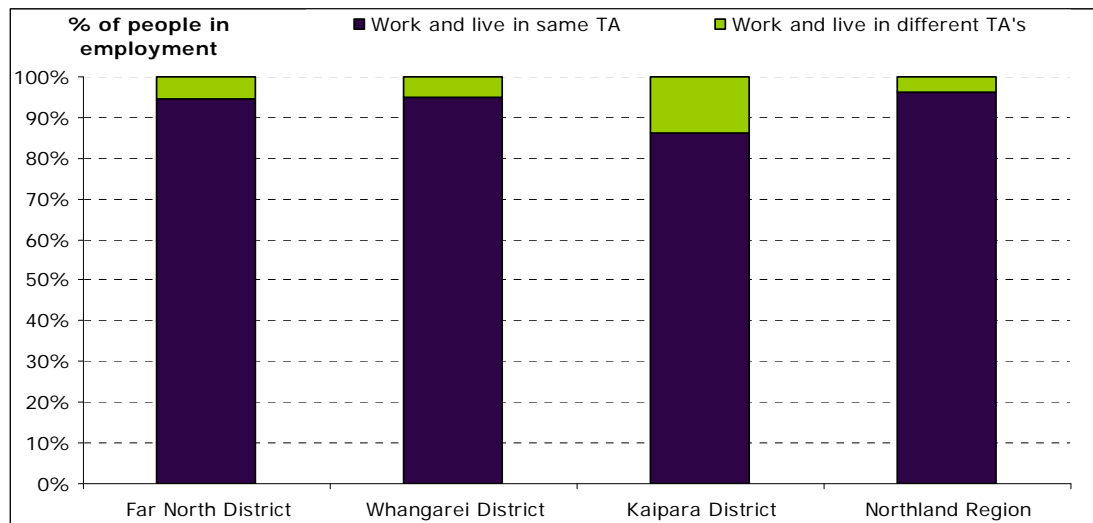
## **2.4 Commuting**

Chart 11 shows that few people living in the Northland Region commute outside the region to work. In 2006, the proportion of Northland residents commuting from Northland to other regions for work was small relative to other regions, such as Auckland. Within Northland's TAs, people living in Kaipara District were most likely to commute to another TA to work. These people were most likely to commute to Rodney District (in the Auckland region) or Whangarei District.

Anecdotal information from Northland indicates that the number of people who commute to work within Northland has increased over recent years. Growth in the number of people moving to coastal areas, such as Bream Bay, has helped create a commuter workforce among these residents, who tend to be employed in Whangarei District.

Improved roading in the Northland Region, particularly surrounding Whangarei District and other population centres, has also had an impact on creating a larger commuting workforce by making it easier for people to commute further distances to work.

**Chart 11: Commuting pattern of the working population in 2006**



Source: Census 2006, Statistics New Zealand

***Discussion point 3:***

- **Does this picture fit with what you know about the region?**
- **What are the main commuter flows within the region? Think about: where people commute from/to, what routes they use.**
- **Will there be any changes to the region's infrastructure that might change these commuter flows in future?**

### 3. EMPLOYERS' LABOUR REQUIREMENTS

The employers represented in this section are those whose businesses are located within the relevant regional boundary. This can be a whole businesses or the branch of a business that has other units in other regions. The people these businesses employ may live in the region or elsewhere. So this section looks at people *working* in the region regardless of where they live. This is different to the previous section, which counted employed people *living* in the region regardless of where they work.

The first part of this section looks at the size of businesses in the regional economy (in terms of the number of people they employ). This is an important characteristic of the labour market because it indicates the extent to which employees are concentrated in a small number of big firms or a large number of small firms. There's also a connection between business size and skill requirements. Generally speaking, people in larger businesses are employed in more specialised jobs compared with people employed in smaller businesses.

The following two sections look at two different types of labour requirements – new labour requirements, which result from businesses expanding, and replacement labour requirements, which result from the normal turnover of employees in a business, regardless of whether the business is growing.

The analysis of new labour requirements looks at overall changes in employment in regional industries and the occupations people perform in these industries. Information about industries tells us what is produced. Information about occupations tells us about the skill requirements of people's jobs and the tasks they are required to perform. It is worth noting that this section will also look at types of labour for which employers' requirements have declined. The analysis of replacement labour requirements looks particularly at replacements due to retirements.

Using employment numbers underestimates labour requirements because it excludes requirements that employers are not able to meet. In the current tight labour market, many employers are unable to fill their job vacancies because people with the required skills are not available. The later section entitled *Labour market outcomes* looks at the available measures of unmet labour demand to determine the extent to which labour supply is not meeting labour demand.

#### 3.1 Firm size<sup>7</sup>

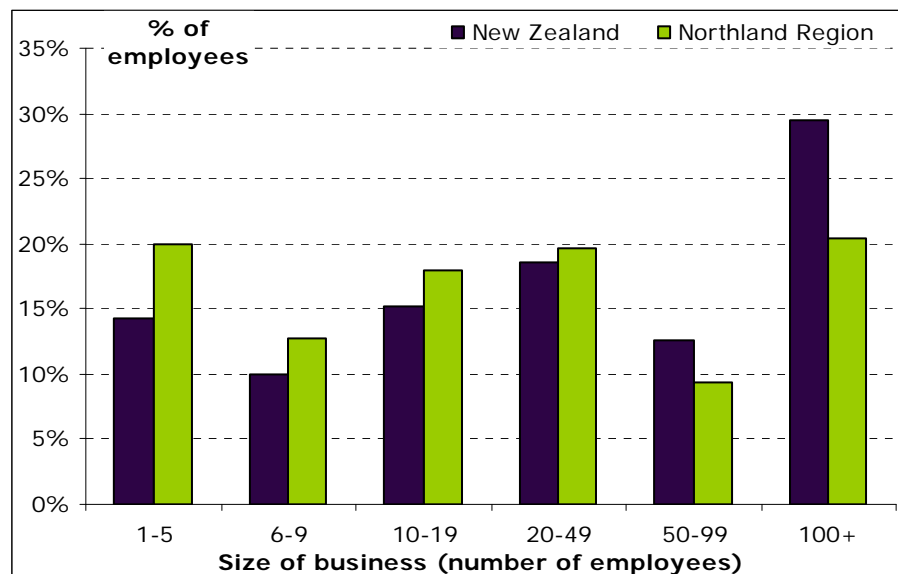
A large percentage of employees in Northland work in small to medium sized businesses. In 2006, 70% of employees in Northland worked in businesses that had less than 50 employees compared with 58% nationally. Breaking this down further, 51% of businesses in Northland had fewer than 20 employees compared

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<sup>7</sup> Employment data provided by 2006 Business Demographics Statistics differs to employment data provided by the 2006 Population Census. This is a result of the different scope, coverage and time period of the two surveys. See the Data Dictionary for information about these surveys.

with 39% nationally. The share of employees working in larger businesses was correspondingly low – 20% of Northland employees work in businesses with over 100 employees, compared with almost 29% on average in New Zealand.

**Chart 12: Share of employees working in businesses by business size in 2006**



Source: Business Demographic Statistics 2006, Statistics New Zealand

In 2006, Kaipara District and, to a lesser extent, Far North District had large concentrations of employees working in small businesses. Employees in Whangarei District were more likely to work in large businesses compared to Far North District and Kaipara District. This said, a smaller percentage of employees in Whangarei District worked in businesses with over 50 employees compared to the national average in 2006. Whangarei is Northland's main business centre, as shown by over half of all employees in Northland working in the TA.

**Table 9: Employees working in businesses by business size in 2006**

	% of all employees						Total
	1-5	6-9	10-19	20-49	50-99	100+	
New Zealand	14%	10%	15%	19%	13%	29%	1,843,888
Northland Region	20%	13%	18%	20%	9%	20%	51,469
Far North District	22%	15%	17%	21%	8%	17%	17,916
Whangarei District	17%	11%	18%	19%	11%	24%	28,293
Kaipara District	32%	14%	21%	17%	2%	15%	5,171

Source: Business Demographic Statistics 2006, Statistics New Zealand

## 3.2 New labour requirements

### *Goods and services produced*

In the five years between 2001 and 2006, the goods and services produced in Northland changed. This had an effect on employment in the region. Chart 13 shows that, with the exception of the Agriculture, Mining and Communication services industries, employment grew in all sectors of the economy. In 2006,

there were significantly more people employed in Northland in the Property and Business Services, Construction and Health industries compared to 2001.

Across the whole country, recent economic growth during this period has been driven by the domestic economy. Domestically, interest rates over the last eight years have been lower than those over the previous 20 years (although higher than many other OECD countries), and combined with inward migration have contributed to the growth in consumer spending and the property market. As employment grew and house prices rose, consumers were spurred on to continue spending.

This has created demand for retail products, residential construction, property services, hospitality, personal services, cultural services and recreational services. As these businesses expanded, this created demand across the supply chain for wholesale goods, business services, communications, transport and storage, finance and insurance. Government spending has also contributed to growth in health and community services and education.

The exporting sector (mainly Agriculture and Manufacturing) had a more difficult time. The strong New Zealand dollar reduced the competitiveness of manufactured goods and agricultural products in international markets. The Agriculture, Forestry and Fishing industry is an important industry employer in the Northland Region, as shown in Chart 13. This importance is largely a result of Northland's favourable crop growing climate, which has created large scale employment in the forestry, horticulture and viticulture areas. Employment in horticulture and viticulture tends to be seasonal, and is especially common around Kerikeri. The seasonality of this industry has created problems finding, and then housing, workers in Northland.

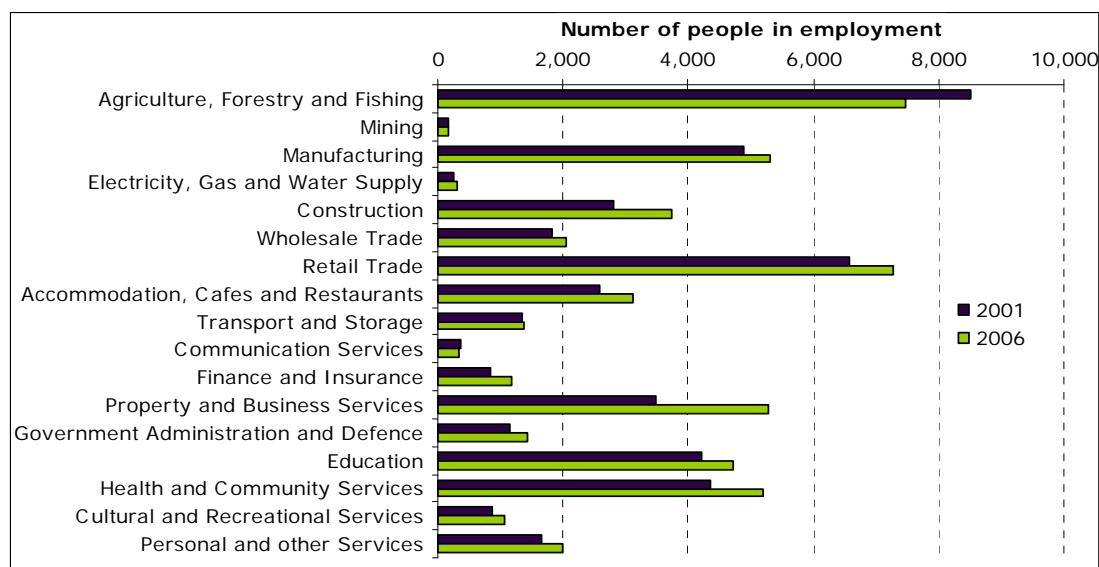
Local industry information from Northland indicates that seasonal labour shortages in the horticulture and viticulture industry usually result from either a lack of coordination between seasonal labour markets, such as kiwifruit and kumara, or through a lack of worker expertise. This said, information from Northland indicates that employers who maintain a good relationship with backpackers and accommodation providers generally do not have problems attracting and retaining workers.

In response to the seasonality issues in the horticulture and viticulture industry in Northland, a Seasonal Coordinator was appointed to the area in 2006 and the Rural Training Solutions programme was recently trialled to try and alleviate these pressures. The overarching role of the Seasonal Coordinator is to work with Work and Income to improve the coordination of workers in the horticulture and viticulture industry in Northland. The Rural Training Solutions programme was created with the aim of cultivating a full-time labour force within the horticulture and viticulture industry with the skills and abilities to work across a range of different seasonal demands.

The Tourism industry is another important industry in the Northland Region. Tourism is not specifically shown in Chart 13 as the industry is made up of a

range of different industries, such as Accommodation, Cafes and Restaurants and Retail Trade. The Tourism industry is of particular importance to areas such as the Bay of Islands, 90 Mile Beach, Kerikeri and Hokianga. The region's commitment to further developing the Tourism industry in Northland is identified in Activate Northland, a major regional initiative funded by New Zealand Trade and Enterprise. Activate Northland aims to build Northland's tourism capability and grow 400 small to medium sized businesses along the Twin Discovery Highway in order to increase visitor numbers, length of stay and money spent within in the region<sup>8</sup>.

**Chart 13: Employment in industries in Northland from 2001 to 2006 (people whose workplace address is in the region)**



Source: Census 2006 and 2001, Statistics New Zealand

Table 10 shows a broader view of labour utilisation, illustrating changes in the number of hours worked as well as employment. The fastest growing industry in Northland between 2001 and 2006 was Property and Business Services (1,797 more jobs between 2001 and 2006, 9.9% of employment) followed by Construction (912 more jobs, 7.0% of employment) and Health and Community Services (846 more jobs, 9.7% of employment).

While Agriculture employment declined by over 1,000 jobs between 2001 and 2006, it is still the industry with the largest concentration of employment (14.0%) in the region. Retail Trade was the second largest industry of employment in Northland (13.6% of employment), with employment mainly in Supermarket and Grocery Stores, and Motor Vehicle Servicing. Property and Business Services was the third largest employing industry (9.9% of employment), with employment focused around Business Management Services and Other Business Services.

The fast growing industries in Northland (Property and Business Services, Finance and Insurance and Construction) were also fast growing industries nationwide.

<sup>8</sup> For more information about the Northland Major Regional Initiative, visit: <http://www.nzte.govt.nz/section/11962.aspx#northland>

The regional Property and Business and Finance and Insurance industries grew faster than the national average. The Construction industry in Northland did not grow as fast as the national average.

Growth in the number of hours worked in Northland was slightly lower than the national average. The number of hours worked in Northland grew faster than the national average in the relatively large regional industries of Manufacturing, Accommodation, Cafes and Restaurants, Property and Business Services, Education and Health and Community Services industries. The number of hours worked in Northland grew slower than the national average in Agriculture, the largest employment industry in the region.

**Table 10: Changing employment in industries in Northland from 2001 to 2006 (people whose workplace address is in the region)**

	Northland Region			New Zealand	
	Employment count	% Growth		Employment	Hours Worked
		Employment	Hours Worked		
Agriculture, Forestry and Fishing	7,482	-12%	-16%	-3%	-7%
Mining	165	-5%	0%	24%	24%
Manufacturing	5,310	8%	6%	1%	-1%
Electricity, Gas and Water Supply	321	34%	31%	2%	-1%
Construction	3,726	32%	28%	42%	39%
Wholesale Trade	2,037	11%	6%	8%	5%
Retail Trade	7,266	10%	9%	14%	11%
Accommodation, Cafes and Restaurants	3,120	21%	15%	18%	13%
Transport and Storage	1,386	2%	1%	13%	10%
Communication Services	348	-5%	-13%	5%	3%
Finance and Insurance	1,176	38%	39%	24%	20%
Property and Business Services	5,286	52%	49%	30%	26%
Government Administration and Defence	1,431	25%	19%	13%	9%
Education	4,725	12%	8%	10%	5%
Health and Community Services	5,187	19%	20%	15%	14%
Cultural and Recreational Services	1,068	23%	18%	25%	22%
Personal and other Services	2,004	21%	19%	18%	15%
<b>Total</b>	<b>53,502</b>	<b>14%</b>	<b>10%</b>	<b>15%</b>	<b>11%</b>

Source: Census 2001 and 2006, Statistics New Zealand

It is estimated<sup>9</sup> that economic activity in the Northland Region increased by 4.6% in the year to March 2007 (a year since the 2006 Census) compared with 2.4% growth nationally. The growth in economic activity in Northland was the second largest in New Zealand. Large scale economic growth, such as that estimated in *Regional Trends*, indicates that overall employment is likely to have increased in Northland since the 2006 Census.

**Discussion point 4:**

- **Does this industry profile fit with what you know about the region?**

***National, industry and regional impacts on regional employment growth***

Employment change in a region over time is a product of three separate components:

- The performance of the national economy influences the performance of the local economy.
- National industries grow at different rates – the scale of an industry in a region and the national performance of that industry influence the performance of the local economy.
- The same industry can grow at different rates in different regions – region-specific industry growth influences the performance of the local economy.

By separating out employment growth resulting from each of these three factors, we get a much clearer view of the causes of regional employment growth than from the total employment growth figure<sup>10</sup>. This section investigates each of these three influences on regional employment growth.

<http://www.nzte.govt.nz/section/11962.aspx#northland>

If the Northland labour market had grown at the national rate, employment would have grown by just over 7,000 employees – this result is represented by the column in Chart 14 called National Growth.

After removing the influence of national growth, i.e. had the industries in Northland grown at national growth rates, employment would have declined by just under 1,100 employees – this result is represented by the column in Chart 14 called Industry Mix.

After removing the influence of an industry's national growth rate, the remainder shows that employment would have increased by just over 400 employees – this result is represented by the column in Chart 14 called Region Specific. These three components combine to produce an increase in employment in Northland of 6,400 people between 2001 and 2006.

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<sup>9</sup> *Regional Trends*, National Bank of New Zealand, May 2007

<sup>10</sup> This method of analysis is commonly referred to as “shift-share” analysis.

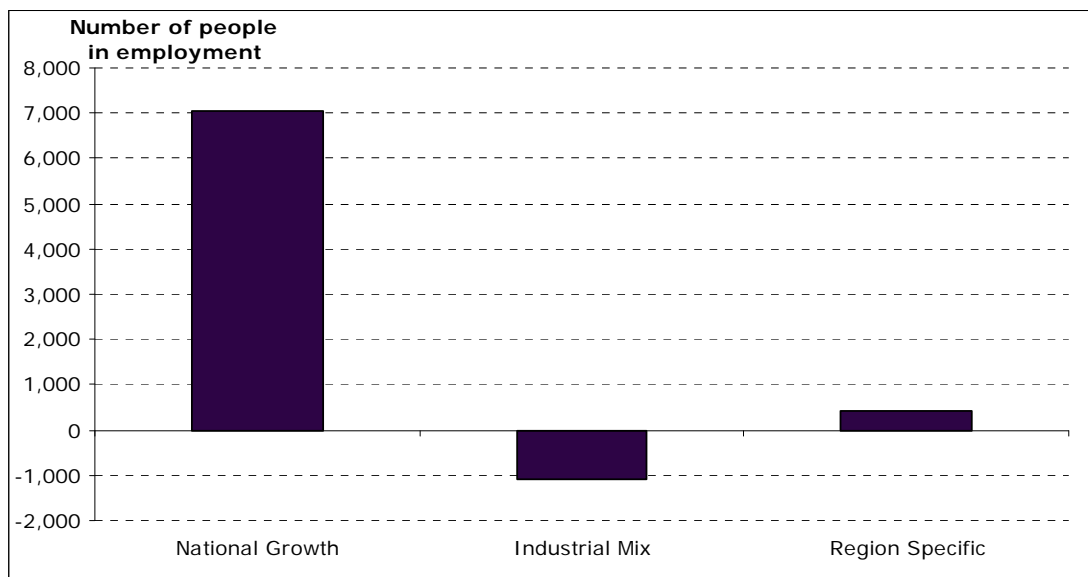
### *Industry mix*

The mix of industries plays an important role in determining employment growth. Country-wide, employment in the Agriculture, Forestry and Fishing industry has fallen because of factors such as the high value of the New Zealand dollar. National employment in the Manufacturing industry has increased only slightly. Because the Agriculture, Forestry and Fishing and Manufacturing industries are relatively large in Northland, the national trends that have been adversely affecting these industries had a relatively large impact on the region.

### *Region specific*

Region specific characteristics have also had an effect on employment growth in the Northland Region. Between 2001 and 2006, employment growth in Northland was larger than growth nationally in the relatively large industries of Manufacturing, Property and Business Services and Health and Community Services (see Table 10). Many variables can influence the performance of a region's industries independently of their national growth including regional infrastructure changes, businesses opening or closing and production issues.

**Chart 14: Components of Northland employment growth 2001 to 2006**



Source: Census 2006 with Department of Labour analysis

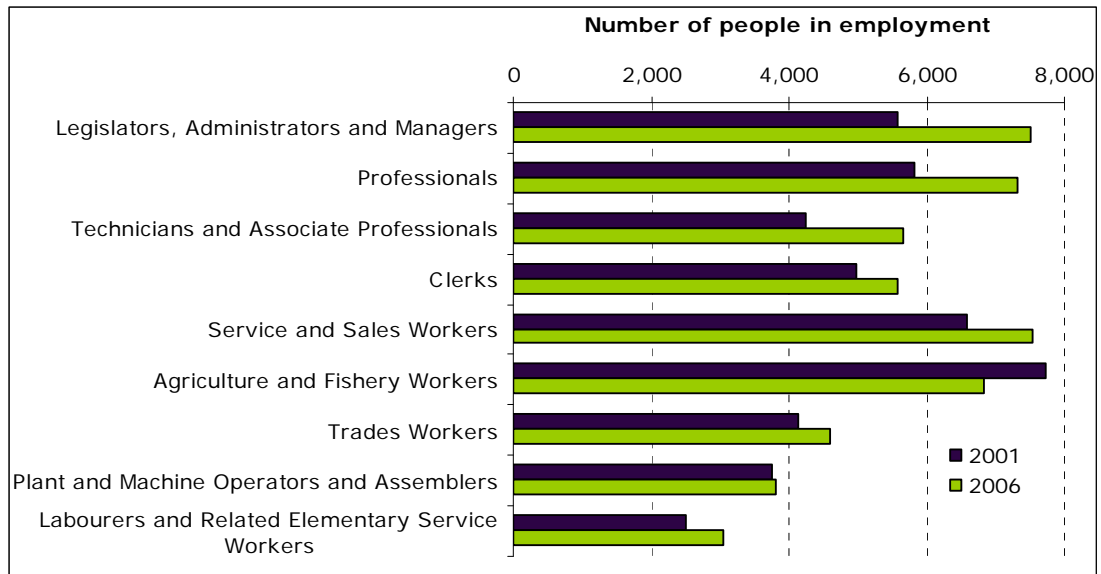
***Discussion point 5:***

- **What regional characteristics have created the current industrial landscape in the region? Think about: climate, topography, population, resources, regional planning and culture.**
- **Is there an over-dependence on a particular sector or sectors?**
- **Are there opportunities for industry clusters?**
- **Have there been or are there any major Foreign Direct Investment opportunities?**
- **Is your regional labour market influenced by offshoring of production?**
- **What have you heard about growing and declining industries?**
- **What international, national and regional forces are driving these changes in the industrial landscape?**
- **What is the outlook for your region's industries?**
- **What do you see as the key regional industries? What are their short-term and long-term priorities for these industries?**

***Employment growth in occupations***

The changing mix of products and services produced in the Northland economy between 2001 and 2006 changed the types of skills in demand. Employment grew in all occupations in Northland except Agriculture and Fishery Workers. The largest gains were seen in highly skilled occupations (Legislators, Administrators and Managers, and Professionals) and the semi-skilled occupation group (Technicians and Associate Professionals), which all had growth rates above the national occupational average. Employment growth in elementary/semi-skilled occupations varied, with Clerks and Service and Sales Workers growing above the national average. Growth in Plant and Machine Operators and Assemblers, Trades Workers and Labourers was lower than the national average.

**Chart 15: Occupation employment levels in Northland from 2001 to 2006 (people whose workplace address is in the region)**



Source: Census 2001 and 2006, Statistics New Zealand

**Table 11: Occupation employment growth in Northland from 2001 to 2006 (people whose workplace address is in the region)**

	% Growth								
	Legislators, Administrators and Managers	Professionals	Technicians and Associate Professionals	Clerks	Service and Sales Workers	Agriculture and Fishery Workers	Trades Workers	Plant and Machine Operators and Assemblers	Elementary Occupations
New Zealand	31%	22%	26%	1%	11%	-6%	16%	4%	21%
Northland Region	35%	26%	34%	12%	14%	-12%	11%	1%	21%

Source: 2006 and 2001 Census, Statistics New Zealand

In 2006, APN News and Media announced that it would relocate their finance and administration department to Whangarei, shifting up to 40 existing jobs and 40 new created positions to the area. APN identified Whangarei as an ideal place to relocate their finance and administration department to because the area had a dynamic regional centre with lifestyle attractions for staff, good business infrastructure and was only two hours from Auckland by road.

In April 2007, Michael Hill Jeweller announced that its Whangarei manufacturing operation unit would be moved to Brisbane, meaning job losses for 17 manufacturing workers. Michael Hill Jeweller stated the move of its manufacturing operation to Brisbane was a result of stiff competition from Asian manufacturers.

### ***Regional, industry and occupational impacts on skill requirements***

Skill requirements can change for a number of reasons. If regional employment is growing strongly, the economic conditions driving this can be expected to increase employer requirements for the whole range of skills. Skill requirements also change because of changes in the mix of goods and services being produced in the economy. If there's an increase in the number of houses being built in the region, there will be an increase in employers' requirements for carpentry skills. Skill requirements also change if the mix of skills required in producing a given amount of a good or service changes. If the house builders in a region begin to use wood frames more and aluminium frames less (maybe because the price of wood has come down), employers' requirements for carpentry skills will increase even if the number of houses being built remains the same.

The following is an outline of what's driving changes in Northland employers' skill requirements.

Highly skilled jobs:

- Employment growth of Legislators, Administrators and Managers was driven by strong growth in the Property and Business Services industry and moderate growth in the Manufacturing and Retail Trade industries. Legislators, Administrators and Managers also became more prevalent within these industries.
- Employment growth of Professionals was driven by strong growth in the Property and Business Services and Health and Community Services industries. Industry growth aside, these workers also became relatively more prevalent in the Property and Business Services industry, and to a lesser extent Government Administration and Defence and Health and Community Services.

Skilled Jobs:

- Technicians and Associate Professional employment growth was driven by relatively strong growth in Property and Business Services and Health and Community Services as well as increased prevalence of these occupations in industries such as Health and Community Services, Retail Trade and Manufacturing.
- Employment growth of Trades Workers was moderate. This was largely a result of strong growth in the Construction industry, where many Trades

Workers are employed. This said, growth in Trades Workers in the Construction industry in Northland was lower than growth in the Construction industry as a whole. Trades Workers are also prevalent in the Manufacturing and Retail Trade industries. For these industries, growth was relatively small, with only a moderate number of new jobs in these industries in Trades Worker occupations.

Semi-skilled and elementary jobs:

- Employment growth in Clerical occupations was moderate. This was largely driven by strong growth in Property and Business Services. A large proportion of clerical workers are employed in this industry, however, few new jobs were in clerical occupations.
- Employment in Service and Sales Workers grew, largely driven by growth in the Retail Trade, Accommodation, Cafes and Restaurants, Property and Business and Personal and Other Services industries. Only a relatively small number of the new jobs in the Retail and Accommodation, Cafes and Restaurants industries were in Service and Sales occupations.
- Employment of Agriculture and Fishery workers declined. This decline was due to employment losses in the Agriculture, Forestry and Fishery industry and a general decline in Agriculture and Fishery workers.
- Employment growth of Plant and Machine Operators and Assemblers was small, as a result of declines in the Manufacturing industry (where many of these workers are employed). Growth in the Construction industry resulted in some employment gains.

Labourer and Related Elementary Service Worker employment grew as a result of growth in the Construction, Wholesale Trade, Manufacturing and Accommodation, Cafes and Restaurant industries. In the Construction and Accommodation, Cafes and Restaurant industries, growth in these low skilled occupations was faster than growth in the industry as a whole.

Anecdotal information from Northland indicates that growth in the marine industry, particularly in Whangarei District, has led to a shortage of skilled boat builder and fitters. In response to this shortage, a marine industry partnership has been set up in Whangarei between the Ministry of Social Development (MSD), NorthTec (Northland's Polytechnic) and businesses in the marine industry. The marine industry partnership was set up when Specialist Marine Interiors, a business handcrafting interiors for luxury vessels, found it extremely difficult to find an additional 30 workers to complete a two year international contract.

***Discussion point 6:***

- **What types of skill are most in demand in the region? Think about: technical skills such as carpentry or sheet metal working, soft skills such as communication, punctuality and management skills.**
- **Are businesses able to articulate their skill demands? If not, why not?**
- **What skills are in growing demand? What is driving this growing demand?**

### **3.3 Replacement labour requirements**

The worker replacement rate measures the proportion of workers that change independent of job availability. The worker replacement rate (WRR) is calculated by taking the Worker Turnover Rate (WTR: People starting and leaving work as a proportion of total jobs) and subtracting the Job Flow Rate (JFR: The creation and destruction of jobs as a proportion of total jobs).

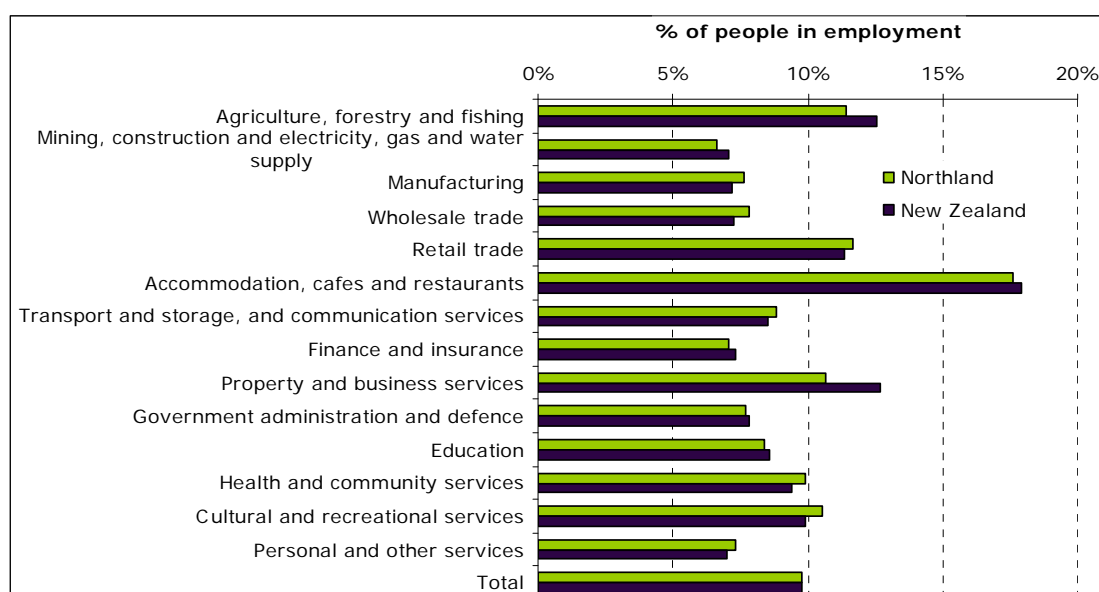
$$\text{WRR} = \text{WTR} - \text{JFR}$$

By taking the amount of workers that change and subtracting the amount of jobs that change, the remainder is the proportion of workers that change independent of job availability, the underlying rate of worker replacement. When employment conditions are held constant, this is the rate at which workers need to be replaced.

The highest labour replacement requirements in Northland are likely to be in the Accommodation, Cafes and Restaurants, Retail Trade and Agriculture industries. The Agriculture and Retail Trade industries are large employers in Northland. Combined with relatively high staff turnovers, this is likely to create significant replacement labour requirements. The high staff turnover rate in the Accommodation, Cafes and Restaurants industry in Northland coupled with the moderately large number of people employment in the industry is also likely to create significant labour requirements.

Local industry sources in Northland indicate that businesses that are willing to understand and adapt to the changing needs of workers are more likely to have lower staff turnover rates than businesses that are not. For example, in industries where skills shortages are evident, some businesses are competing through the traditional means (wages) as well as by offering alternative methods to attract workers, such as offering free breakfast and encouraging social gathering.

**Chart 16: Worker replacement rates in industries in Northland in 2006**



Source: Linked Employee Employer Dataset, Statistics New Zealand

### 3.4 Retirements

Staff retirement is a key source of replacement labour demand. As the workforce ages, younger people need to replace older workers in sufficient numbers, otherwise the workforce will contract.

While there is no standard measure of estimating retirement, the Department of Labour uses a calculation based on 20% of the workforce aged 60 and above retiring every year<sup>11</sup>. Based on this ratio, the Department of Labour estimates that, annually, nationwide retirements amount to about 2.0% of the whole workforce. Retirement rates of over 3.0% are expected among Agriculture and Fishery Workers. Most other occupations are expected to have retirement rates of between 1.5% and 2.5%.

Retirement rates were higher across all occupations groups in Northland compared to the national average. Retirement rates were notably higher for Legislators, Administrators and Managers, Technicians and Associate Professionals, Clerks, Agriculture and Fishery Workers and Elementary Occupations. This reflects the different age profiles of these occupations.

The overall number of people estimated to retire in Northland each year is estimated at upwards of 1,300 people. A large number of these retirements are expected to be Agriculture and Fishery Workers – about 280 are expected to retire every year due to the size and relative older age profile of people in this occupation. Retirements among Labourers and Related Elementary Service Workers and Legislators, Administrators and Managers are also expected to be large, with just under 200 people expected to retire each year. The Service and

<sup>11</sup> For further information about this retirement rate, see the Glossary of Terms at the end of this report.

Sales Workers occupation group has the smallest retirement rate in Northland compared to other occupations but is expected to have a significant number of people retiring each year (125 people) due to the size of the occupation group.

**Chart 17: Annual retirement rates in occupations in 2006 (for people who live in Northland)**



Source: Census 2006, Statistics New Zealand

**Discussion point 7:**

- Do these trends fit with what you know about aging occupations or industries in your region?

## 4. LABOUR MARKET OUTCOMES

There are broadly two ways in which employers' labour requirements can be mismatched with the labour offered by the workforce.

Firstly, employers' labour requirements may be insufficient to provide work for everyone who is willing and able to work. Some people are likely to be unemployed. The first part of this section looks at unemployment rates to get a sense of this mismatch.

Secondly, even when job vacancies are available, some people might still be unemployed because they don't have the skills required for the jobs. The second part of this section looks at employers' ability to fill vacancies.

The third part of this section looks at how labour market outcomes differ among people with different qualifications.

The final part of this section looks at wages. Wages are the result of complex interactions between employers and workers and are influenced by such things as the value that workers add in the production process, and the extent to which employers' skill requirements can be met by the skills on offer in the workforce. When employers are facing skill shortages, workers with those skills are in a position to bid up their wages.

When labour requirements are relatively low, competition for jobs places employers in a position to bid down wages (or at least suppress wage rises).

Wages are a key labour market outcome not least because they are a major part of many employers' production costs, and they have a direct impact on the standard of living of people in employment.

### 4.1 Employment and unemployment

#### *Unemployment*<sup>12</sup>

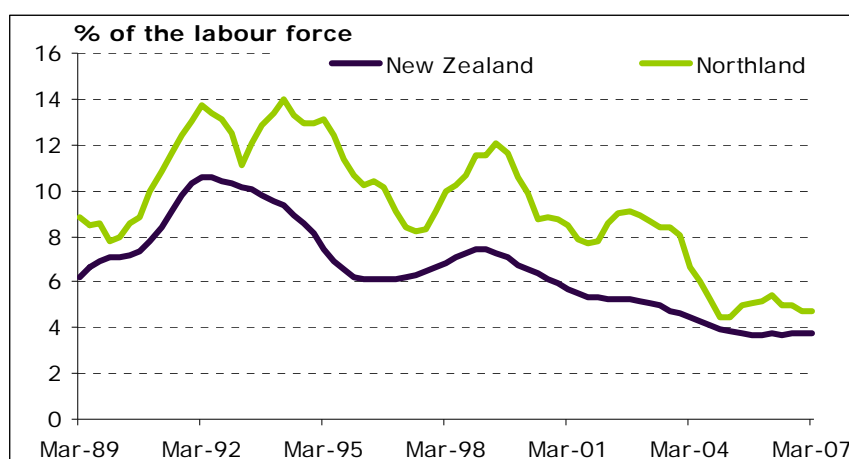
The unemployment rate in Northland, like the country as a whole, is at an historical low.

As already noted earlier in this report, recent economic growth has been centred in domestic industries such as the Retail Trade, Construction and Property and Business Services. The amount of labour used to produce a given output in these industries is much higher than, say, the dairy, mining or manufacturing industries, where machinery plays a much bigger part of the production process. Recent economic growth has, therefore, resulted in significant job growth.

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<sup>12</sup> Unemployment rates from the Household Labour Force Survey and Population Census differ. This is a result of the different scope and coverage of the two surveys. For more information, see the Data Dictionary.

**Chart 18: Unemployment rate from 1989 to 2007 (12-month moving average)**



Source: Household Labour Force Survey, Statistics New Zealand

Unemployment levels in the Northland Region have been consistently higher than the national average since comparable quarterly records began in 1988. This said, the regional trend, while more volatile, has tended to mirror the national trend, which has been steadily declining since the early 1990s.

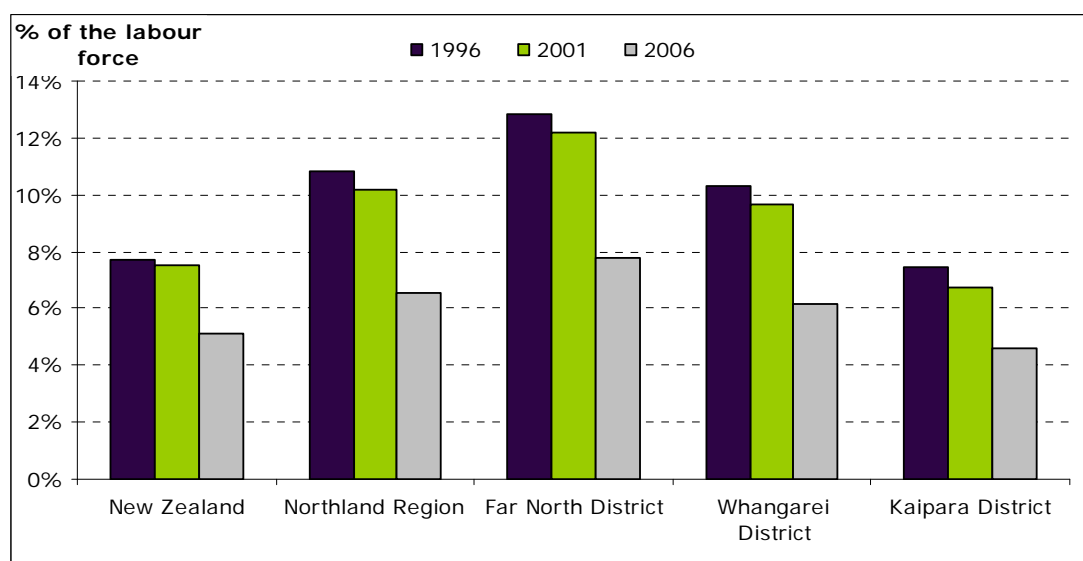
After peaking during the recessionary period of the early 1990s, the rate of unemployment has declined from around 14% to 4.7% in March 2007. This decline in unemployment has been seen across most regions of New Zealand, as a long period of strong economic growth has led to the demand for labour exceeding the increased supply between 2001 and 2006.

Unemployment rates in Northland were, with the exception of Kaipara District, higher than the national average. 2006 Census data show the unemployment rate in Far North District remained relatively high at 7.8%, despite the largest fall in the unemployment rate in the region.

The unemployment rate in Kaipara District was 4.6% in 2006, 0.5 percentage points lower than the national average (5.1%). The decline in the Kaipara District unemployment rate was relatively small compared to other Northland TAs, reflecting the already high employment rate in the area (see Chart 20).

Overall disparities in unemployment rates in Northland TAs converged between 1996 and 2006. Variances in unemployment rates in Northland TAs still exist however.

**Chart 19: Unemployment rates for Northland in 1996, 2001 and 2006**



Source: Census 1996, 2001 and 2006, Statistics New Zealand

***Discussion point 8:***

- **Do these trends fit with what you know about your region?**
- **Are there any particular areas of high unemployment?**
- **Have there been any major redundancies in recent years?**
- **What types of people are over-represented among the unemployed in your region?**

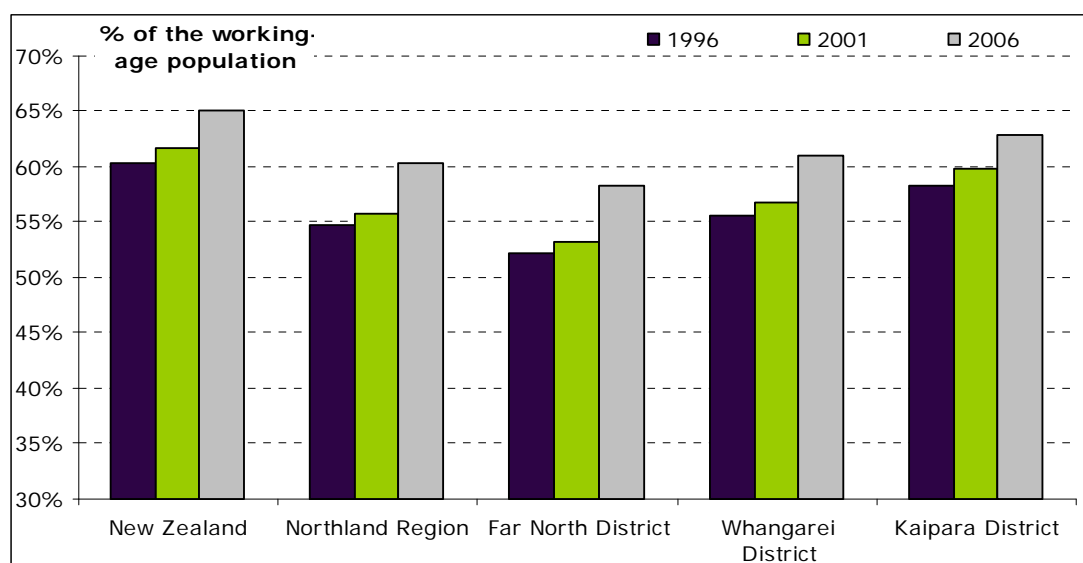
***Employment rates***

Employment is one indicator of the level of employers' labour and skill requirements and the extent to which the skills and labour on offer meets these requirements. Expressing the number of people employed as a percentage of the working-age population is a useful way to compare sub regional labour markets.

Employment rates increased throughout Northland, as they did nationally, between 1996 and 2006.

During this period, employment rates increased most in Far North District and the least in Kaipara District. Far North District had the lowest employment rate in 1996. In 2006, in all three Northland TAs the employment rates were above 58%. Employment rates in Northland were still below the national average of 65%. Sub-regional disparities still remain – Kaipara District's employment rate of 63% is well above Far North District's employment rate of 58%.

**Chart 20: Employment rates for Northland in 1996, 2001 and 2006**



Source: Census 1996, 2001 and 2006, Statistics New Zealand

Section 2 outlined changes in the skills offered in the Northland labour force by using qualification attainment as a proxy measure of skills. The analysis in section 3 demonstrated that Northland employers' skill requirements have also changed. Growth in labour requirements has been much greater for highly skilled jobs such as Legislators, Administrators and Managers, Professionals and Technicians and Associated Professionals. Table 12 draws this together by showing changes in key labour market outcomes for people with differing levels of qualification attainment.

Table 12 shows that the employment growth was larger in Northland for people with higher qualification levels than people with no or school based qualifications between 2001 and 2006. The general increase in qualification levels of the population has meant that the growth in the number of low qualified people (people with no qualifications or school based qualifications) in the labour force has been lower than overall employment growth in Northland.

Growth in employment across all qualification levels in Northland has been greater than growth in the labour force. This has resulted in declining unemployment rates. The fall in the unemployment rate was relatively large for people with no qualifications and Level 1, 2 or 3 certificates gained post-school. The difference between employment growth and labour force growth was the largest for these qualification levels.

Participation rates increased for people with school based qualifications. The participation rate declined slightly for people with post school qualifications and remained static for people with no qualifications.

This suggests that if employers' labour requirements continue to focus on people with higher qualifications, and if these requirements are to be met, improved productivity, and increases in labour force participation provide potential for providing the supply of skills necessary. This said, the population is expected to

age. If this is the cases, the potential for future growth in the highly skilled labour force will be more limited.

**Table 12: Highest qualification of the working-age Northland population by labour force status 2001 and 2006**

	Growth 2001 to 2006		Employment rate		Unemployment rate		Participation rate	
	Employment	Labour force	2001	2006	2001	2006	2001	2006
No Qualification	12%	6%	44.2%	47.0%	15.3%	10.2%	52.2%	52.3%
School based Qualification	7%	4%	62.1%	65.3%	8.4%	6.2%	67.8%	69.6%
Level 1, 2 or 3 Certificate Gained Post-school	34%	28%	66.3%	66.1%	12.6%	8.5%	75.8%	72.3%
Level 4 Certificate Gained Post-school or Level 5 or 6 Diploma	44%	41%	73.6%	72.4%	5.1%	3.3%	77.5%	74.8%
Bachelor Degree Or Higher	65%	64%	80.3%	80.0%	3.0%	2.4%	82.8%	82.0%
<b>Total</b>	<b>17%</b>	<b>13%</b>	<b>55.8%</b>	<b>60.3%</b>	<b>10.2%</b>	<b>6.5%</b>	<b>62.1%</b>	<b>64.5%</b>

Source: Census 2001 and 2006, Statistics New Zealand

Note: Highest qualification levels in this table differ to highest qualification levels in Chart 5. The qualifications in this table have been aggregated to increase comparability between 2001 and 2006 Census data. The 2006 Census had a different classification system to the 2001 Census. As a result of the classification changes, some 2001 qualifications were not coded the same way in 2006. The changes primarily affect Level 4 Certificate Gained Post-school, Level 5 Diploma and Level 6 Diploma.

## 4.2 Skills shortages

Recently, New Zealand has experienced unprecedented levels of reported shortages of skilled and unskilled labour. In many areas of the labour market employers have reported that these shortages have prevented them from increasing employment as much as they would like. The introduction to section 3 explained that the full extent of employers' labour requirements is difficult to estimate. Employment numbers are a useful measure of requirements that have been met by suitable workers, but the extent and nature of any shortfalls is an area we know little about.

The 2006 Survey of Employers who have Recently Advertised (SERA) helps fill this gap. The survey takes a sample of job vacancies that have been advertised and establishes whether employers who have advertised these vacancies were able to fill them with an adequately qualified and experienced person within ten weeks of advertising. What's unique about SERA is that job vacancies are sorted into occupations. This enables shortages of jobs requiring different skills to be assessed. While the survey has historically focused only on highly skilled and skilled occupations, the 2006 SERA includes information for semi-skilled/elementary occupations.

Table 13 shows national advertised vacancy fill rates for the nine major occupation groups (currently, information is available from SERA only at the national level). As a rule of thumb, if an occupation has a fill rate of less than 80%, this is seen as an indication that it is in moderate shortage, if the fill rate is less than 60%, it is seen as being in severe shortage, and if the fill rate is less than 40%, it is considered to be in extreme shortage.

Nationally, Professionals, Technicians and Associate Professionals, Trade Workers and Plant and Machine Operators and Assemblers are in severe shortage, but this is likely to vary from region to region. What conclusions can be drawn about Northland? The analysis of employment growth and its drivers in section 3 can help. Considering national fill rates alongside regional employment enables us to draw tentative conclusions about possible skill shortages in the region. A low fill rate alongside strong employment growth is a sign that an occupation may be in shortage.

Without full regional data, a tentative conclusion can be made that Northland is experiencing shortages of Professionals, Technicians and Associate Professionals and Trade Workers and that further growth in the employment of people in these occupations is being constrained as a result. In contrast, it is difficult to conclude that the severe shortage of Plant and Machine Operators and Assemblers seen nationwide exists in Northland. Employment growth has been strong among Professionals and Technicians and Associate Professionals because of strong growth in industries such as Property and Business Services and because, regardless of industry growth, these workers have also become more prevalent in a range of industries. In contrast, employment of Plant and Machine Operators and Assemblers in Northland has grown only a little over the last five years.

A number of avenues have been explored in Northland over the last few years to try and alleviate skills shortages in the region. In addition to initiatives already mentioned in this report, the Northland Skills Forum and Northland Trade Training Initiative specifically tackle the issues of skills shortages in Northland.

All other occupation groups are in moderate shortage nationwide. Of these groups, employment growth in Northland has been greatest among Legislators, Administrators and Managers. Therefore it is likely that regional shortages are more severe among this group than the others.

**Table 13: New Zealand job vacancy fill rates by major occupation**

<b>Occupation Group</b>	<b>Fill rate in 2006</b>
Legislators, Administrators and Managers	67%
Professionals	56%
Technicians and Associate professionals	54%
Clerks	75%
Service and Sales Workers	63%
Agriculture and Fishery Workers	70%
Trade Workers	48%
Plant and Machine Operators and Assemblers	54%
Labours and other Elementary Service Workers	61%

Source: Department of Labour, Survey of Employers who have Recently Advertised

The occupational groups referred to above include many different types of job. The degree to which these individual jobs types are in shortage varies considerably. There isn't the capacity in this report to go into any further detail. This detail can instead be found in the Department of Labour report: Occupations in Shortage in New Zealand: 2006. This is available on the DoL website – <http://www.dol.govt.nz/publications/jvm/shortage2006/index.asp>.

***Discussion point 9:***

- **To what extent does the supply of labour and skills in the region match the demand for labour and skills?**
- **What industries are facing skill shortages and what skills are in shortage (e.g. technical skills, soft skills or management skills)?**
- **Are the skills available to meet these shortages?**
- **How adaptable is the region's workforce (i.e. are there people with specific skills for specific jobs and/or are there people whose skills suit them to a range of jobs?)**
- **What labour market dynamics such as seasonality, inward/outward migration rapid industry growth, recruitment difficulties affect the skill demand-supply matching process?**
- **To what extent has industry growth been constrained by skill or labour shortages?**
- **Are education and training providers delivering courses that teach participants the skills employers need?**
- **Are there any barriers to this happening?**
- **Are enough people coming through the education and training system to meet employer needs?**
- **Are industries attracting and training enough young people to replace the older workers when they retire?**

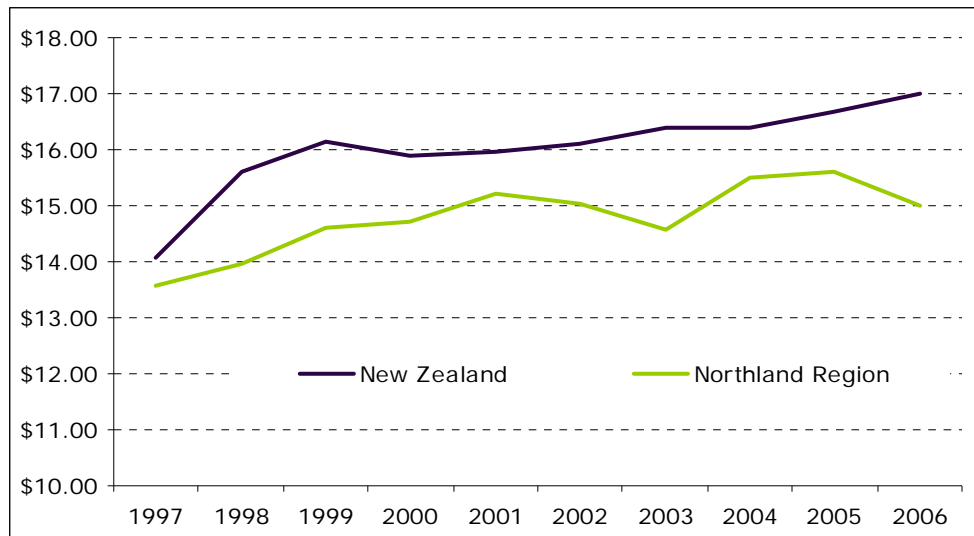
### **4.3 Wages**

Chart 21 shows that ,in real terms<sup>13</sup> from 1997 to 2006, the median hourly wage rate in the Northland Region has been consistently lower than the national average. That said, only two regions (Auckland and Wellington) have been consistently above average. One reason for this is that the economies of these two urban labour markets create more employment for highly skilled (and therefore more highly paid) workers than other regions. In 2006, regional median hourly earnings increases did not keep up with the relatively high level of inflation. Real hourly earnings fell as a result.

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<sup>13</sup> Regional earnings have been deflated using the Consumer Price Index, and are expressed in 2006 prices.

**Chart 21: Real median hourly earnings for residents of Northland compared with the national median from 1997 to 2006**

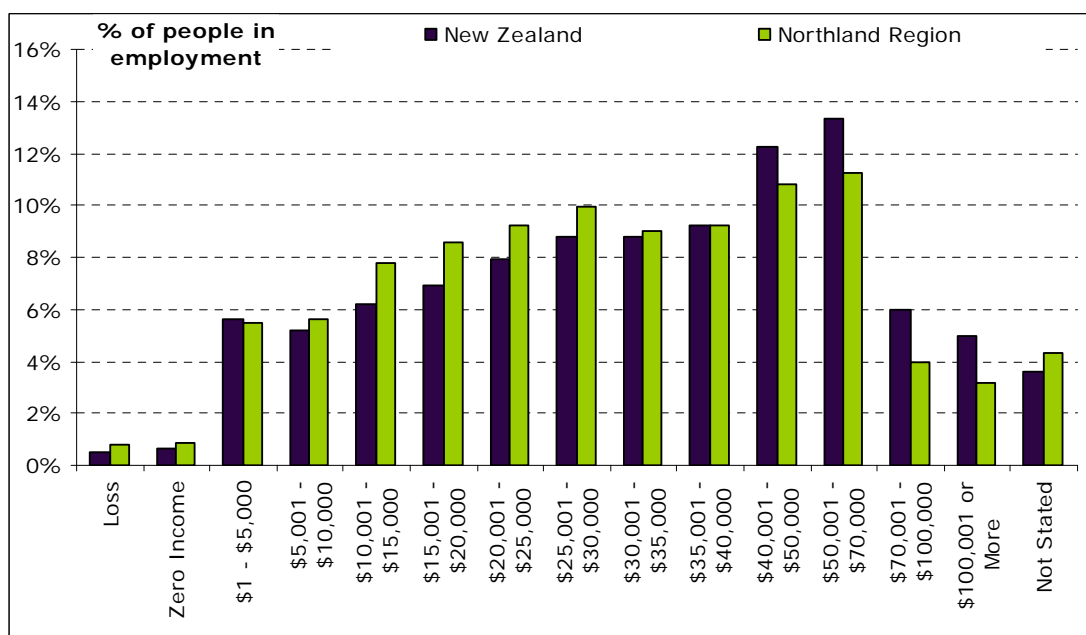


Source: New Zealand Income Survey, Consumer Price Index (CPI), Statistics New Zealand

The annual incomes of people in employment are shown in Chart 22. This is only an approximate measure of earnings because people in employment earn money from other sources such as investments.

That said, the pattern in 2006 fits with what we already know about earnings in Northland – that they were less than the national average. Chart 22 suggests that this is because the region has relatively fewer working people with incomes higher than \$40,000, and relatively more working people with incomes between \$10,000 and \$35,000.

**Chart 22: Total personal incomes for people in employment and resident in Northland compared with the national average in 2006**



***Discussion point 10:***

- **What determines wage levels and wage growth in your region's industries?**
- **Are wage levels in any industries a barrier to attracting skills?**

## GLOSSARY OF TERMS

**Adjusted labour force participation rate:** See 'labour force participation rate'.

**Employment:** The number of people in work for one hour or more per week.

**Employment rate:** The proportion of the working-age population that is employed.

**Ethnicity:** Ethnic group or groups that people identify with or feel they belong to. Ethnicity is a measure of cultural affiliation, as opposed to race, ancestry, nationality or citizenship. Ethnicity is self-assigned, and people can belong to more than one ethnic group.

**Highest qualification:** Combines highest secondary school qualification and post-school qualification to derive a single highest qualification by category of attainment for people aged 15 years and over. Qualifications are registered at one of ten levels, with the level depending on the complexity of the skills and knowledge that are being recognised. Level 1 qualifications are the least complex and are open-ended downward to capture all learning. Level 10 is the most complex. The levels do not equate to 'years spent learning' but reflect the content of the qualification. A brief description of the contents of the qualifications is:

- Level 1 to 3: Senior secondary school learning (NCEA), foundation skills and introductory trades training
- Level 3 to 4: initial trade certificates
- Level 5 to 7 are advanced trades, technical and business qualifications
- Level 7 and above are graduate and post-graduate qualifications.

**Highly skilled workers:** Legislators, Administrators and Managers, and Professionals.

**Hours worked per week:** Total number of hours usually worked in employment per week by the working-age population.

**Income:** Before-tax income from a range of source such as labour, entrepreneurial skills and assets, and transfers received. Tax credits and money received by borrowing, making withdrawals from savings and receiving repayments of loan principal are excluded.

**Industry:** The type of activity undertaken by the organisation, enterprise or business within which a person aged 15 years and over is employed. Based on a classification managed by Statistics New Zealand.

**Industry mix:** The expected growth in employment in a particular industry calculated using the national growth rate for that industry.

**Job vacancy fill rate:** The proportion of vacancies that were filled within six to eight weeks (trades) ten weeks (professionals) of advertising; a key indicator of skill shortage.

**Labour force:** The labour force consists of members of the working-age population who are classified as employed or unemployed (people in the labour force).

**Labour force participation rate:** The proportion of the working-age population who are either employed or unemployed. The terms 'labour force participation rate' and 'participation rate' are often used interchangeably. The adjusted labour force participation rate is a hypothetical rate showing what the regional labour force participation would be like if the age and gender structure was the same as the national average.

**Labour supply:** People that make themselves available for work and the attributes and skills these people bring to the workplace.

**Labour demand:** People that employers are willing to have work for them, the number of hours they want them to work and the skills and attributes employers need from these people to perform their jobs.

**Not in the labour force:** Any person in the working-age population who is neither employed nor unemployed. This includes for example, retired people, students and people at home with children.

**Occupation:** A set of jobs that require the performance of similar or identical tasks, and is collected for employed people aged 15 years and over. Based on a classification managed by Statistics New Zealand.

**Retirement rate:** There is no agreed definition of what a retirement rate is; the age and rate of retirement is determined by a set of personal decisions made individually by members of the labour force. What can be stated is that retirement is generally linked to age, and the age of retirement is generally over 60. The retirement rate definition used in this report is based upon a calculation used within the Job Vacancy Monitoring Programme (JVMP) at the Department of Labour. The JVMP retirement rate definition is: 20% of the labour force aged 60 and above divided by the total labour force. While the retirement rate is only an estimate, it highlights the industries and occupations where older workers are and signals where the rate of retirement is likely to be highest.

**Semi-skilled/elementary workers:** Clerks, Services/Sales Workers, Plant/Machinery Workers, and Elementary Workers.

**School leaver attainment:** Highest qualification held by school leavers.

**Skilled workers:** Technicians and Associate Professionals, and Trades Workers.

**Statistics New Zealand (SNZ):** New Zealand's national statistical office.

**Unemployment:** The number of people in the working-age population who are without a paid job, are available for work and have actively sought work in the past four weeks or have a new job to start within the next four weeks.

**Unemployment rate:** The number of unemployed people expressed as a percentage of the labour force.

**Wage and salary earnings:** Earnings received for paid employment that is undertaken. Earnings consist of wages and salaries, back pay, commissions, allowances, bonuses (regular and non-regular), gratuities (tips), fees, piece rates, retainers, honoraria and paid leave.

**Working-age population:** Population aged 15 years and over.

**Worker replacement rate:** The worker replacement rate measures the proportion of workers that change independent of job availability. The rate is calculated by taking the rate at which employment changes occur (the Worker Turnover Rate) and subtracting the rate at which jobs change.

## **DATA DICTIONARY**

### **Census of Population and Dwellings 1996, 2001, 2006**

Conducted by Statistics New Zealand, the Census of Population and Dwellings is the primary source of information on the size, composition, distribution, economic activities and state of well-being of the population. Census data are used for analysing trends, planning public services and allocating public funds in the areas of health, housing, transport, education, income and law and order. The census is run every five years. The census data used in this report are for the years 1996, 2001 and 2006. Data for 2006 were released in December 2006.

### **Household Labour Force Survey**

Produced by Statistics New Zealand, the Household Labour Force Survey (HLFS) collects information relating to the employed, the unemployed and those not in the labour force who comprise New Zealand's working-age (15 years and over) population. It provides a regular, timely and comprehensive portrayal of New Zealand's labour force and Statistics New Zealand's official employment measure. The HLFS is produced quarterly and available from the December quarter 1985.

### **Differences between the Household Labour Force Survey and the Census of Population**

The HLFS and the Census of Population both produce estimates of labour force statistics such as unemployment and labour force participation rates. Because these two sources are gathered differently, they can produce different estimates. The HLFS is the official measure of labour market information for New Zealand. Within the Annual In-Depth Regional reports, Census of Population calculations of labour market variables have been used in many instances as estimates from this source are more robust for small areas, especially at the Territorial Authority level.

### **New Zealand Income Survey**

Produced by Statistics New Zealand, the New Zealand Income Survey (NZIS) is run annually as a supplement to the Household Labour Force Survey (HLFS) during the June quarter (April to June). The purpose of the NZIS is to produce a comprehensive range of income statistics, which allows analysis of the links between labour force status, educational achievement and income of individuals and households.

### **Department of Labour Analysis tools**

The Department of Labour has developed a series of on-line, labour market "tools". The tools are interactive, updatable and based on the latest official statistics. They enable the user to select a particular industry, occupation or region and compare information with other sectors, regions or the national average. The three labour market analysis tools currently available are; [Occupational indicators](#), [Regional industry snapshot](#) and [Regional industry trends](#).

These tools are stored on the Department of Labour website – <http://www.dol.govt.nz/services/LMI/tools.asp>

## **Business Demography Statistics**

Produced by Statistics New Zealand, Business Demography statistics provide an annual snapshot (as at February) of the structure and characteristics of New Zealand businesses. Statistics are available on a range of variables including industry, region, institutional sector, business type, degree of overseas ownership and employment levels. Business Demography statistics are available from 1987.

The dataset used in this report is an aggregation of two databases, Business Demography 2006 (which excludes Agricultural Production), and the Agricultural Production (A01) statistics collected in 2006.

## **Job Vacancy Monitor**

Produced by the Department of Labour, the Job Vacancy Monitor (JVM) is a monthly analysis of job advertisements in selected editions of 25 major newspaper around New Zealand and two internet job boards. The purpose of the job ad series is to monitor changes in occupational labour markets. It also provides the basis of the sample for the Survey of Employers who have Recently (SERA). The JVM data is available from 2003.

## **Survey of Employers Who Have Recently Advertised**

Produced by the Department of Labour, the Survey of Employers who have Recently Advertised (SERA) gathers information from businesses who recently advertised vacancies. Information gathered from these interviews includes whether the business has filled their vacancy, and how many suitable applicants applied. From this information the Department is able to calculate a fill rate for each occupation. The Department is also able to calculate the average number of suitable applicants per vacancy, which is a useful indicator of the level of under-supply or over-supply within an occupation.

## **Linked Employer-Employee Dataset (LEED)**

Produced by Statistics New Zealand, official quarterly statistics produced from the Linked Employer-Employee Data (LEED) measure labour market dynamics, providing an insight into the operation of New Zealand's labour market and its relationship to business performance. LEED uses existing administrative data drawn from the Inland Revenue Department (IRD), together with business data from Statistics NZ's Business Frame (BF).

## **National and Subnational Population Projections**

Population projections are estimates of the size and composition of the population at a future date. Projections are available for the total New Zealand population, local and regional populations, various ethnic populations, families and households, and the labour force. A number of alternative series are produced in each set of projections. These use different combinations of appropriate

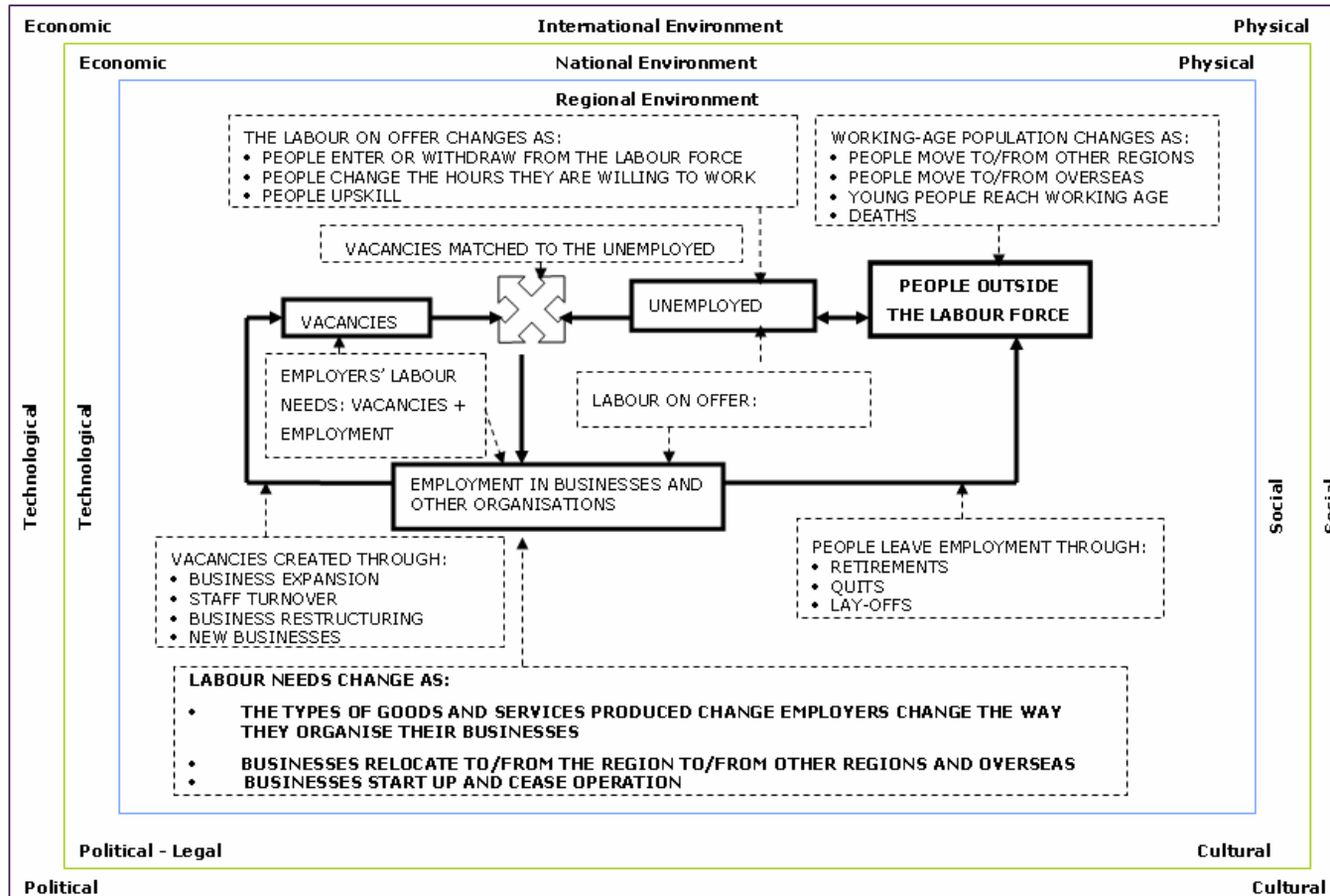
assumptions about future fertility, mortality, net migration, inter-ethnic mobility, living arrangement type and labour force participation patterns of the population. Projections are updated every 2–3 years.

The data used in this report is the Subnational Population Projection 2001-base to 2026 update released in February 2005. These projections have as a base the estimated resident population of each area at 30 June 2001. A revised set of Population projections, based upon Census 2006 data will be released later in 2007.

### **School Leavers data**

Produced by the Ministry of Education, the monitoring of the highest attainment of school leavers is based on the annual 1st March survey of secondary and composite schools. These statistics include all full-time regular students, full-time adult students and special education class students who left school during the period 1 March 2005–28 February 2006, to go on to further education, training, the workforce or other activities.

## APPENDIX 1 – REGIONAL LABOUR MARKET DYNAMICS



Note: this diagram is adapted from Morrison, (1989) Labour Adjustment in Metropolitan Regions, Victoria University Press for Institute of Policy Studies, which was itself extensively adapted from Carmichael (1981) which in turn was adapted from Holt (1969)

## APPENDIX 2 – REGIONAL LABOUR MARKET KNOWLEDGE MANAGERS CONTACT DETAILS

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\* Jenny Smith is also the contact for the Districts of the greater Wellington region on sub-regional labour market development issues.

